COUNTY NOTICES PURSUANT TO A.R.S. § 49-112

Because each county writes rules and regulations in its own unique style, County Notices published in the *Register* do not conform to the standards of the *Arizona Rulemaking Manual*. With the exception of minor formatting changes, the rules (including subsection labeling, spelling, grammar, and punctuation) are reproduced as submitted.

NOTICE OF FINAL RULEMAKING

MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

[M11-312]

PREAMBLE

1. Sections Affected — **Rulemaking Action**

Rule 321: Municipal Solid Waste Landfills	Amended
Rule 360: New Source Performance Standards	Amended
Rule 370: Federal Hazardous Air Pollutant Program	Amended
Rule 371: Acid Rain	Amended
Appendix G: Incorporated Materials	Amended

2. The statutory authority for the rulemaking, including both the authorizing statute (general) and the statutes the rule is implementing (specific):

Authorizing Statutes: A.R.S. §§ 49-474, 49-479 and 49-480

Implementing Statutes: A.R.S. §§ 49-112 and 49-471.08

3. The effective date of the rule:

August 17, 2011

4. A list of all previous notices appearing in the Register:

Notice of Rulemaking Docket Opening: 16 A.A.R. 1678, August 27, 2010

Notice of Expedited Rulemaking: 17 A.A.R. 1039, May 20, 2011

5. The name and address of department personnel with whom persons may communicate regarding the rulemaking including the accuracy of the economic, small business, and consumer impact statement contained in Item 10 of this DRAFT notice of final rulemaking:

Name: Cheri Dale
Planning and Analysis Division
Maricopa County Air Quality Department

Address: 1001 N. Central Ave., Suite 595
Phoenix, AZ 85004

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E-mail: aqplanning@mail.maricopa.gov

6. An explanation of the rule, including the department's reasons for initiating the rule:

Summary:

The Maricopa County Air Quality Department (department) incorporated by reference various federal regulations and documents promulgated by the U.S. Environmental Protection Agency (EPA) and published in the Federal Register. These rules implemented federal requirements according to each federal program identified or applicable source type subject to these regulations. This action included amending the incorporation by reference actions relating to New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Acid Rain and other parts of Title 40 of the Code of Federal Regulations (CFR). This action amended the incorporation by reference date from "July 1, 2009" to "July 1, 2010" in each of the rules to remain current with

federal regulations. The adoption of the amendments to Maricopa County Air Pollution Control Regulations Rules 321, 360, 370, 371, and Appendix G was necessary prior to requesting the EPA's delegation of authority to Maricopa County for the implementation and enforcement of the described federal regulations and documents.

In addition, the amendments corrected typographical or other clerical errors; made minor grammatical changes to improve readability or clarity; modified the format, numbering, order, capitalization, punctuation, or syntax of certain text to increase standardization within and among rules; or made various other minor changes of a purely editorial nature. As these changes did not alter the sense, meaning, or effect of the rules, they were not described in detail here, but are readily discerned in the "underline/ strikeout" version of the rules contained in Item 17 of this notice.

Significant Amendments common to Rules 321, 360, 370, 371, and Appendix G:
- Amended the incorporation by reference date from "July 1, 2009" to "July 1, 2010."
- Amended the AVAILABILITY OF INFORMATION section to include electronic availability of the EPA documents and the availability of ASTM standards.

Significant Amendments for Rule 321: Municipal Solid Waste Landfills:
No updates to 40 CFR 60, Subpart WWW occurred between July 1, 2009, and June 30, 2010.

The following amendment to Rule 321 was adopted:
- Amended the wording of Section 200 to maintain consistency between rules concerning the application of definitions to a particular rule.

Significant Amendments for Rule 360: New Source Performance Standards:
This incorporation by reference was substantially identical to 40 CFR 60, Subparts A, Ce, Ec and Y; and the ADEQ's Standards of Performance rules R18-2-901 through R18-2-905. Updates to the federal NSPS regulations at 40 CFR 60 were incorporated by reference as of July 1, 2010, and no future editions or amendments.

40 CFR 60, Subpart A – General Provisions:
- Amended at 74 FR 51367, October 6, 2009.
- Amended at 74 FR 51949, October 8, 2009.

40 CFR Part 60, Subpart Ce – Standards of Performance for New Stationary Sources and Emissions Guidelines for Existing Sources: Hospital/Medical/Infectious Waste Incinerators [Amended at 74 FR 51367 October 6, 2009].

40 CFR 60, Subpart Ec – Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which Construction is Commenced after June 20, 1996 [Amended at 74 FR 51367 October 6, 2009].

40 CFR 60, Subpart Y – Standards of Performance for Coal Preparation and Processing Plants [Amended at 74 FR 51949, October 8, 2009].

The following amendment to Rule 360 was adopted:
- Amended the wording of Section 200 to maintain consistency between rules concerning the application of definitions to a particular rule.

Significant Amendments for Rule 370: Federal Hazardous Air Pollutant Program:
This incorporation by reference was substantially identical to 40 CFR 63 Subparts A, CC, ZZZZ, VVVVVV, ZZZZZZ, AAAAAAA, BBBBBBB, CCCCCCC, DDDDDDD, and the ADEQ's National Emission Standards for Hazardous Air Pollutants rules R18-2-1101 through R18-2-1102. No updates to 40 CFR 61 occurred between July 1, 2009 and June 30, 2010. Updates to the federal NESHAP regulations at 40 CFR 63 were incorporated by reference as of July 1, 2010, and no future editions or amendments.

40 CFR 63, Subpart A [Amended at 74 FR 55669, October 28, 2009 and at 74 FR 63503, December 3, 2009].

40 CFR 63, Subpart CC – National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries [Amended at 74 FR 55669, October 28, 2009. Corrected at 75 FR 37730, June 30, 2010].

40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [Amended at 75 FR 9647, March 3, 2010, and at 75 FR 37732, June 30, 2010].

40 CFR 63, Subpart VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources [Added at 74 FR 56007, October 29, 2009].

40 CFR 63, Subpart ZZZZZZ – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries [Amended at 74 FR 46493, September 10, 2009].

40 CFR 63, Subpart AAAAAAA – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing [Added at 74 FR 63236, December 2, 2009. Amended at 75 FR 12988, March 18, 2010].

40 CFR 63, Subpart BBBBBBB – National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry [Added at 74 FR 69194, December 30, 2009].

40 CFR 63, Subpart CCCCCCC – National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing [Added at 74 FR 63503, December 3, 2009. Amended at 75 FR 10184, March 5, 2010, and at 75 FR 31317, June 3, 2010].

40 CFR 63, Subpart DDDDDDD – National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing [Added at 75 FR 522, January 5, 2010].

The following amendments to Rule 370 were adopted:

- Added 40 CFR 63, Subpart VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.
- Added 40 CFR 63, Subpart AAAAAAA – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing Manufacturing.
- Added 40 CFR 63, Subpart BBBBBBB – National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry.
- Added 40 CFR 63, Subpart CCCCCCC – National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing.
- Added 40 CFR 63, Subpart DDDDDDD – National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing.
- Amended the wording of Section 200 to maintain consistency between rules concerning the application of definitions to a particular rule.

Significant Amendments for Appendix G, Incorporated Materials:
The amendments to Appendix G were substantially identical to 40 CFR 50 with Appendices A-1, A-2, S, and T; 40 CFR 51 Appendix S; 40 CFR 53; 40 CFR 58 with Appendices A, C, D, E, and G; 40 CFR 60 Appendix A; and AP-42; and the ADEQ's Appendix 2, Test Methods and Protocols and ADEQ's R18-2-102, Incorporated Materials. Updates to the Code of Federal Regulations referenced in this appendix were incorporated by reference as of July 1, 2010, and no future editions or amendments.

- 40 *CFR* 50 – National Primary and Secondary Ambient Air Quality Standards [Amended at 75 FR 6473, February 9, 2010, and at 75 FR 35519, June 22, 2010].
- 40 CFR 50, Appendix A-1 – Reference Measurement Principle and Calibration Procedure for the Measurement of Sulfur Dioxide in the Atmosphere (Ultraviolet Fluorescence Method) [Added at 75 FR 35519, June 22, 2010].
- 40 CFR 50, Appendix A-2 – Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method) [Redesignated at 75 FR 35519, June 22, 2010].
- 40 CFR 50, Appendix S – Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Nitrogen (Nitrogen Dioxide) [Added at 75 FR 6473, February 9, 2010].
- 40 CFR 50, Appendix T – Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide) [Added at 75 FR 35519, June 22, 2010].
- 40 CFR 51 – Prevention of Significant Deterioration (PSD) [Amended at 74 FR 65692, December 11, 2009].
- 40 CFR 51 – Appendix S Emission Offset Interpretative Ruling [Amended at 74 FR 65692, December 11, 2009].
- 40 CFR 53–Ambient Air Monitoring Reference and Equivalent Methods [Amended at 75 FR 35519, June 22, 2010].
- 40 CFR 53, Subpart A – General Provisions [Amended at 75 FR 35519, June 22, 2010].
- 40 CFR 53, Subpart B – Procedures for Testing Performance Characteristics of Automated Methods SO2, CO, O3 and NO2 [Amended at 75 FR 35519, June 22, 2010].
- 40 CFR 53, Subpart C – Procedures for Determining Comparability between Candidate Methods and Reference Methods [Amended at 75 FR 35519, June 22, 2010].

- 40 CFR 58 – Ambient Air Quality Surveillance [Amended at 75 FR 6473, February 9, 2010, and at 75 FR 35519, June 22, 2010].
- 40 CFR 58, Subpart A – Ambient Air Quality Surveillance [Amended at 75 FR 6473, February 9, 2010].
- 40 CFR 58, Subpart B – Ambient Air Quality Surveillance [Amended at 75 FR 6473, February 9, 2010, and at 75 FR 35519, June 22, 2010].
- 40 CFR 58, Appendix A – Quality Assurance Requirements for SLAMS, SPMs and PSD Air Monitoring [Amended at 75 FR 6473, February 9, 2010, and at 75 FR 35519, June 22, 2010].
- 40 CFR 58, Appendix C – Ambient Air Quality Monitoring Methodology [Amended at 75 FR 6473, February 9, 2010].
- 40 CFR 58, Appendix D – Network Design Criteria for Ambient Air Quality Monitoring [Amended at 75 FR 6473, February 9, 2010, and at 75 FR 35519, June 22, 2010].
- 40 CFR 58, Appendix E– Probe and Monitoring Path Siting Criteria for Ambient Air Quality Monitoring [Amended at 75 FR 6473, February 9, 2010].
- 40 CFR 58, Appendix G – Uniform Air Quality Index (AQI) and Daily Reporting [Amended at 75 FR 6473, February 9, 2010, and at 75 FR 35519, June 22, 2010].

The following amendment to Appendix G was adopted:

- Added 40 CFR 50**,** Appendix A-1 **–** Reference Measurement Principle and Calibration Procedure for the Measurement of Sulfur Dioxide in the Atmosphere (Ultraviolet Fluorescence Method).

7. Demonstration of compliance with A.R.S. §49-471.08 expedited rulemaking:

Maricopa County declared this as an expedited rulemaking action.

A.R.S. § 49-471.08(A)(1)

Demonstration that the rule or ordinance making is substantially identical to the sense, meaning and effect of the federal or state rule or law from which it is derived.

Rule 321 is substantially identical to 40 CFR 60, Subpart WWW and the ADEQ's Standards of Performance for Existing Municipal Solid Waste Landfills, R18-2-731.

Rule 360 is substantially identical to 40 CFR 60, Subparts A, Ce, Ec and Y; and the ADEQ's Standards of Performance rules, R18-2-901 through R18-2-905.

Rule 370 is substantially identical to 40 CFR 63, Subparts A, CC, ZZZZ, VVVVVV, ZZZZZZ, AAAAAAA, BBBBBBB, CCCCCCC, and DDDDDDD; and the ADEQ's National Emission Standards for Hazardous Air Pollutants rules, R18-2-1101 through R18-2-1102.

Rule 371 is substantially identical to 42 CFR 72, 74, 75, 76, Acid Rain; and the ADEQ's Acid Rain Rule, R18-2-333.

Appendix G is substantially identical to 40 CFR 50 with Appendices A-1, A-2, and T; 40 CFR 51 Appendix S; 40 CFR 53; 40 CFR 58 with Appendices A, C, D, E, G; 40 CFR 60 Appendix A; and AP-42; ADEQ's Appendix 2, Test Methods and Protocols; and ADEQ's R18-2-102, Incorporated Materials.

A.R.S. § 49-471.08(A)(2)

Written finding by the Control Officer setting forth the reasons why the rule or ordinance making is necessary and does not alter the sense, meaning or effect of the federal or state rule or law from which it is derived.

This rulemaking was required to update the applicability dates in these rules. It incorporated subparts that were passed by the federal government which are required to be implemented by the department. Rules 321, 360, 370, 371, and Appendix G do not alter the sense, meaning or effect of the federal regulations and state rules from which they are derived, as they incorporated language that is essentially the same as the federal code of regulations and the state's applicable rules.

A.R.S. § 49-471.08(A)(3)

Demonstration that fees established in the rule or ordinance do not exceed limits specified in § 49-112.

Per A.R.S. § 49-112(B), a county may adopt rules in lieu of a state program that are as stringent as a state program, if the county demonstrates that the cost of obtaining permits or other approvals from the county will be approximately equal to or less than the costs of obtaining similar permits. Rules 321, 360, 370, 371, and Appendix G do not establish fees. Any costs associated with these rules will come from permit application fees for sources

obtaining a permit revision to reflect new emission limits, due to applicability of a new standard. Therefore, fees associated with these rules will be exactly the same as fees associated with similar permits.

Compliance with § 49-112
Under A.R.S. § 49-479(C), a county may not adopt a rule or ordinance that is more stringent than the rules adopted by the Director of the ADEQ for similar sources unless it demonstrates compliance with the requirements of A.R.S. § 49-112.

A.R.S. § 49-112(A)
When authorized by law, a county may adopt a rule, ordinance, or other regulation that is more stringent than or in addition to a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if all the following conditions are met:

1. The rule, ordinance or other regulation is necessary to address a peculiar local condition; and
2. There is credible evidence that the rule, ordinance or other regulation is either:
   a. Necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible; or
   b. Required under a federal statute or regulation, or authorized pursuant to an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule, ordinance or other regulation is equivalent to federal statutes or regulations.

The revisions to Rules 321, 360, 370, 371 and Appendix G reflected revisions to federal regulations and documents promulgated by the EPA and published in the Federal Register notices cited in Item 6 of this rulemaking. Other changes were made to correct typographical or other clerical errors. Maricopa County is in compliance with A.R.S. § 49-112(A) in that the department adopted revisions to Rules 321, 360, 370, 371 and Appendix G that are not more stringent than nor in addition to a provision of A.R.S. Title 49 or rules adopted by the Director of the ADEQ or any Board or Commission authorized to adopt rules pursuant to A.R.S. Title 49, therefore no demonstration under A.R.S. § 49-112 is necessary.

A.R.S. § 49-112(B)
The A.R.S. § 49-112(B) demonstration did not apply because these particular rules are in the portion of the department's air quality program that is administered under direct statutory authority. Therefore, these rules were not adopted or revised in lieu of a state program.

8. A reference to any study relevant to the rule that the department reviewed and either proposes to rely on or not rely on its evaluation of or justification for the rule, where the public may obtain or review each study, all data under lying each study, and any analysis of each study and other supporting material:

No studies were reviewed in reference to this expedited rulemaking action. All studies were conducted when the federal and state rule or law was proposed and adopted.

9. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

10. The preliminary summary of the economic, small business, and consumer impact:

Maricopa County incorporated by reference the following federal regulations and documents promulgated by the EPA and published in the Federal Register: New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), Acid Rain and other parts of Title 40 Code of Federal Regulations (CFR). These amendments should not have an economic impact on businesses in Maricopa County and should not impose additional costs on the regulated community, small businesses, political subdivisions, and members of the public beyond that already incurred by reason of federal or state rule or law. The costs of compliance with these rules have already occurred and were considered when the federal and state rule or law was proposed and adopted.

11. The name and address of department personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:

Name: Cheri Dale
Planning and Analysis Division
Maricopa County Air Quality Department

Address: 1001 N. Central Ave., Suite 595
Phoenix, AZ 85004

Telephone: (602) 506-0169
Fax: (602) 506-6179
E-mail: aqplanning@mail.maricopa.gov

12. Description of the changes between the proposed rules, including supplemental notices and final rules:

Since the Notice of Expedited Rulemaking of Rules 321, 360, 370, 371, and Appendix G was published in the Arizona Administrative Record, 17 A.A.R. 1039, May 20, 2011, the department amended the name of the "American Society for Testing and Materials (ASTM)" to "ASTM International" to reflect the current official name of the organization. The following amendments to Rules 321, 360, 370, 371, and Appendix G were adopted:

- **Amendments common to Section 103 in Rules 321, 360, and 370:**
  - Amended the name of the "American Society for Testing and Materials (ASTM)" to "ASTM International" to reflect the current official name of the organization.
  - Amended "ASTM methods" to "ASTM standards."
- **Amendments to Section 104 in Rule 371:**
  - Amended the name of the "American Society for Testing and Materials (ASTM)" to "ASTM International" to reflect the current official name of the organization.
  - Amended "ASTM methods" to "ASTM standards."
- **Amendments to Appendix G:**
  - Amended the name of the "American Society for Testing and Materials (ASTM)" to "ASTM International" to reflect the current official name of the organization.
  - Amended "ASTM methods" to "ASTM standards."

13. A summary of the comments made regarding the rule and the department response to them:

No comments were received during the comment period.

14. Any other matters prescribed by the statute that are applicable to the specific department or to any specific rule or class of rules:

Not applicable.

15. Incorporations by reference and their location in the rules:

The following are incorporated by reference as of July 1, 2010:

Amended Incorporations	Location
40 CFR 60, Subparts A, Ce, Ec, Y Appendices.	Rule 360
40 CFR 63 Subparts A, CC, ZZZZ, VVVVVV, ZZZZZZ, AAAAAAA, BBBBBBB, CCCCCCC, and DDDDDDD	Rule 370
40 CFR 50 and Appendices A through R; 40 CFR 51, Subpart A, Appendix A; and Appendix M; and Appendix S; Appendices S and W; 40 CFR 53; 40 CFR 58, and all appendices; 40 CFR 60, all appendices.	Appendix G
EPA Publication No. AP-42, 1995, "Compilation of Air Pollutant Emission Factors," Volume I: Stationary Point and Area Sources, Fifth Edition, including Supplements A, B, C, D, E, F, and Updates 2001, 2002, 2003, and 2004, and all updates as of July 1, 2010.	Appendix G

16. Was this rule previously an emergency rule?

No

17. The full text of the rule follows:

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 321
MUNICIPAL SOLID WASTE LANDFILLS

INDEX

Adopted 05/14/97
Revised 03/01/00
Revised 03/07/01
Revised 11/19/03
Revised 03/15/06
Revised 12/17/08
Revised 09/16/09
Revised 07/07/10
Revised 08/17/11

MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 321
MUNICIPAL SOLID WASTE LANDFILLS

SECTION 100 – GENERAL

101 PURPOSE: To limit the emission of nonmethane organic compounds from municipal solid waste landfills.

102 APPLICABILITY: The provisions of this rule shall apply to each municipal solid waste landfill for which construction, reconstruction, or modification commenced prior to May 30, 1991, and which has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.

103 AVAILABILITY OF INFORMATION: Copies of 40 CFR 60, Subpart WWW are available electronically at: ecfr.gpoaccess.gov; at the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004; or by calling (602) 506-0169 for information. ASTM standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.

SECTION 200 – DEFINITIONS: ~~See Rule 100 of these rules for definitions of terms that are used but not specifically defined in this rule.~~ For the purpose of this rule, the following definitions shall apply~~:~~ , in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

201 ADMINISTRATOR – The Control Officer, except that the Control Officer shall not be empowered to approve alternative or equivalent test methods.

202 AFFECTED FACILITY – Any municipal solid waste landfill to which this rule is applicable.

203 **COMMENCED –** State or condition where an owner or operator has undertaken a continuous program of construction; or where an owner or operator has entered into a contractual obligation to undertake and complete such a program.
204 **CONSTRUCTION –** The fabrication, erection, or installation of an affected facility.
205 **MODIFICATION –** Any physical change in, or change in the method of operation of, an affected facility which would result in a change in actual emissions.
206 **MUNICIPAL SOLID WASTE LANDFILL (MSW LANDFILL) –** An entire, publicly or privately owned, disposal facility in a contiguous geographical space where household waste is placed in or on land. Portions of a MSW landfill may be separated by access roads.
207 **NMOC –** Nonmethane organic compound.
208 **OWNER OR OPERATOR –** Any person who owns, leases, operates, controls, or supervises an affected facility.

SECTION 300 – STANDARDS
301 **STANDARDS OF PERFORMANCE FOR MSW LANDFILLS** The federal standards of performance for municipal solid waste landfills set forth in 40 CFR 60, Subpart WWW adopted as of July 1, ~~2009~~ 2010, and all accompanying appendices, excluding 40 CFR 60.750, are adopted and incorporated by reference with the amendments and revisions set forth in this section. This adoption by reference includes no future editions or revisions. Each owner or operator of an affected facility shall comply with the requirements of 40 CFR 60, Subpart WWW as adopted and, where applicable, revised herein.
301.1 **Collection and Control System Design Plan:** 40 CFR 60.752(b)(2)(i) is amended to read: "Submit a collection and control design plan prepared by a professional engineer to the Administrator for approval not later than 12 months after submittal of the initial NMOC emission rate report."
301.2 **Design Capacity Report:** 40 CFR 60.757(a) is amended to read "Each owner or operator of an affected facility shall submit an initial design capacity report to the Administrator within 90 days from May 14, 1997." 40 CFR 60.757(a)(1) is deleted.
301.3 **NMOC Emission Rate Report:** 40 CFR 60.757(b) is amended to read "Each owner or operator of an affected facility shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate." 40 CFR 60.757(b)(1)(i) is amended to read: "The initial NMOC emission rate report shall be submitted within 90 days from May 14, 1997 and may be combined with the initial design capacity report required in paragraph (a) of this section. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in paragraphs (b)(1)(ii) and (b)(3) of this section."
302 **DELAYED APPLICABILITY:** For an affected facility that first becomes subject to the collection and control system requirement of 40 CFR 60.752 after May 14, 1997, the design plan shall be due not later than 12 months after submittal or scheduled submittal of an NMOC emission rate report of 50 megagrams (55.12 tons) per year or more.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)

SECTION 500 – MONITORING AND RECORDS (NOT APPLICABLE)

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 360
NEW SOURCE PERFORMANCE STANDARDS

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203 COMMENCED
204 CONSTRUCTION
205 MODIFICATION
206 OWNER OR OPERATOR
207 STANDARD
208 STATIONARY SOURCE

SECTION 300 – STANDARDS
301 ADOPTED FEDERAL STANDARDS
302 ADDITIONAL REQUIREMENTS

SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)

SECTION 500 – MONITORING AND RECORDS (NOT APPLICABLE)

Revised 07/13/88
Revised 04/06/92
Revised 11/20/96
Revised 05/14/97
Revised 08/19/98
Revised 04/07/99
Revised 03/01/00
Revised 03/07/01
Revised 11/19/03
Revised 03/15/06
Revised 12/17/08
Revised 09/16/09
Revised 07/07/10
Revised 08/17/11

MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 360
NEW SOURCE PERFORMANCE STANDARDS

SECTION 100 – GENERAL

101 **PURPOSE:** To establish acceptable design and performance criteria for specified new or modified emission sources.

102 **APPLICABILITY:** The provisions of this rule apply to the owner or operator of any stationary source which contains an affected facility on which the construction, reconstruction, or a modification is commenced after the date of publication of any standard applicable to such facility in 40 CFR 60-and for which federal delegation of the implementation and enforcement of the standards to the Maricopa County Air Quality Department (department) has been accomplished. Any such stationary source must also comply with other Maricopa County Air Pollution Control Regulations.

103 **AVAILABILITY OF INFORMATION:** Copies of all 40 CFR, Part 60 revisions currently enforced by the department are available electronically at: ecfr.gpoaccess.gov; at the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004; or by calling (602) 506-0169 for information. ASTM standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.

104 **FEDERAL DELEGATION AUTHORITY:** The department shall enforce the federal new source performance standards (NSPS) (40 CFR Part 60) listed in Section 300 of this rule which have been delegated to the County by the United States Environmental Protection Agency (EPA) for such enforcement. The department may, in addition, enforce such other NSPS as delegated for such enforcement by the EPA to the County.

SECTION 200 – DEFINITIONS: ~~See Rule 100 of these rules for definitions of terms that are used but not specifically defined in this rule.~~ For the purpose of this rule, the following definitions shall apply~~:~~ in addition to those definitions found in

Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

201 **ADMINISTRATOR –** As used in Part 60, Title 40, Code of Federal Regulations, shall mean the Control Officer, except that the Control Officer shall not be empowered to approve alternate or equivalent test methods or alternative standards/work practices, or other nondelegable authorities such as those listed in 40 CFR 60.4(d), except as specifically provided in each subpart.

202 **AFFECTED FACILITY –** With reference to a stationary source, any apparatus to which a standard is applicable.

203 **COMMENCED –** With respect to the definition of "new source" in Section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction, reconstruction, or modification or that an owner or operator has entered into a contracted obligation to undertake and complete, within a reasonable time, a continuous program of construction, reconstruction or modification.

204 **CONSTRUCTION –** The fabrication, erection, or installation of an affected facility.

205 **MODIFICATION –** Any physical change in, or change in the method of operation of, an existing facility which increases the amount of any contaminant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air contaminant (to which a standard applies) into the atmosphere not previously emitted.

206 **OWNER OR OPERATOR –** Any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

207 **STANDARD –** A standard of performance promulgated under this rule.

208 **STATIONARY SOURCE –** Any building, structure, facility, or installation which emits or may emit any air pollutant.

SECTION 300 – STANDARDS

301 **ADOPTED FEDERAL STANDARDS:** The federal standards of performance for those subparts of 40 CFR 60 adopted as of July 1, ~~2009~~ 2010, as listed below, and all accompanying appendices are adopted and incorporated by reference, and no future editions or amendments, in the Maricopa County Air Pollution Control Regulations as indicated. Incorporation by reference does not include nondelegable functions of the EPA Administrator.

301.1 **SUBPART A –** General Provisions; exclude any sections dealing with equivalency determinations or innovative technology waivers, as covered in Sections 111(h)(3) and 111(j) respectively of the Clean Air Act.

301.2 **SUBPART D –** Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971.

301.3 **SUBPART Da –** Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978.

301.4 **SUBPART Db –** Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

301.5 **SUBPART Dc –** Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

301.6 **SUBPART E –** Standards of Performance for Incinerators.

301.7 **SUBPART Ea –** Standards of Performance for Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or before September 20, 1994.

301.8 **SUBPART Eb –** Standards of performance for large municipal waste combustors for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996.

301.9 **SUBPART Ec –** Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which Construction is Commenced after June 20, 1996.

301.10 **SUBPART F –** Standards of Performance for Portland Cement Plants.

301.11 **SUBPART G –** Standards of Performance for Nitric Acid Plants.

301.12 **SUBPART H –** Standards of Performance for Sulfuric Acid Plants.

301.13 **SUBPART I –** Standards of Performance for Hot Mix Asphalt Facilities.

301.14 **SUBPART J –** Standards of Performance for Petroleum Refineries.

301.15 **SUBPART Ja -**Standards of Performance for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007.

301.16 **SUBPART K –** Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and prior to May 19, 1978.

301.17 **SUBPART Ka –** Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and prior to July 23, 1984.

301.18 **SUBPART Kb –** Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

301.19 **SUBPART L –** Standards of Performance for Secondary Lead Smelters.

301.20 **SUBPART M –** Standards of Performance for Secondary Brass and Bronze Production Plants.

301.21 **SUBPART N –** Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces for which Construction Commenced after June 11, 1973.

301.22 **SUBPART Na –** Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for which Construction Commenced after January 20, 1983.

301.23 **SUBPART O –** Standards of Performance for Sewage Treatment Plants.

301.24 **SUBPART P –** Standards of Performance for Primary Copper Smelters.

301.25 **SUBPART Q –** Standards of Performance for Primary Zinc Smelters.

301.26 **SUBPART R –** Standards of Performance for Primary Lead Smelters.

301.27 **SUBPART S –** Standards of Performance for Primary Aluminum Reduction Plants.

301.28 **SUBPART T –** Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants.

301.29 **SUBPART U –** Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants.

301.30 **SUBPART V –** Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants.

301.31 **SUBPART W –** Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants.

301.32 **SUBPART X** – Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities.

301.33 **SUBPART Y –** Standards of Performance for Coal Preparation and Processing Plants.

301.34 **SUBPART Z –** Standards of Performance for Ferroalloy Production Facilities.

301.35 **SUBPART AA –** Standards of Performance for Steel Plants: Electric Arc Furnaces Constructed after October 21, 1974, and on or before August 17, 1983.

301.36 **SUBPART AAa –** Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 17, 1983.

301.37 **SUBPART BB –** Standards of Performance for Kraft Pulp Mills.

301.38 **SUBPART CC –** Standards of Performance for Glass Manufacturing Plants.

301.39 **SUBPART DD –** Standards of Performance for Grain Elevators.

301.40 **SUBPART EE –** Standards of Performance for Surface Coating of Metal Furniture.

301.41 **SUBPART GG –** Standards of Performance for Stationary Gas Turbines.

301.42 **SUBPART HH –** Standards of Performance for Lime Manufacturing Plants.

301.43 **SUBPART KK –** Standards of Performance for Lead-Acid Battery Manufacturing Plants.

301.44 **SUBPART LL –** Standards of Performance for Metallic Mineral Processing Plants.

301.45 **SUBPART MM –** Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations.

301.46 **SUBPART NN –** Standards of Performance for Phosphate Rock Plants.

301.47 **SUBPART PP –** Standards of Performance for Ammonium Sulfate Manufacture.

301.48 **SUBPART QQ –** Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing.

301.49 **SUBPART RR –** Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations.

301.50 **SUBPART SS –** Standards of Performance for Industrial Surface Coating: Large Appliances.

301.51 **SUBPART TT –** Standards of Performance for Metal Coil Surface Coating.

301.52 **SUBPART UU –** Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture.

301.53 **SUBPART VV –** Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after January 5, 1981, and on or before November 7, 2006.

301.54 **SUBPART VVa** – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006.
301.55 **SUBPART WW –** Standards of Performance for the Beverage Can Surface Coating Industry.
301.56 **SUBPART XX –** Standards of Performance for Bulk Gasoline Terminals.
301.57 **SUBPART AAA –** Standards of Performance for New Residential Wood Heaters.
301.58 **SUBPART BBB –** Standards of Performance for the Rubber Tire Manufacturing Industry.
301.59 **SUBPART DDD –** Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.
301.60 **SUBPART FFF –** Standards of Performance for Flexible Vinyl and Urethane Coating and Printing.
301.61 **SUBPART GGG –** Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after January 4, 1983, and on or before November 7, 2006.
301.62 **SUBPART GGGa –** Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after November 7, 2006.
301.63 **SUBPART HHH –** Standards of Performance for Synthetic Fiber Production Facilities.
301.64 **SUBPART III –** Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes.
301.65 **SUBPART JJJ –** Standards of Performance for Petroleum Dry Cleaners.
301.66 **SUBPART KKK –** Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants.
301.67 **SUBPART LLL –** Standards of Performance for Onshore Natural Gas Processing: SO_2 Emissions.
301.68 **SUBPART NNN –** Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.
301.69 **SUBPART OOO –** Standards of Performance for Nonmetallic Mineral Processing Plants.
301.70 **SUBPART PPP –** Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants.
301.71 **SUBPART QQQ –** Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems.
301.72 **SUBPART RRR –** Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.
301.73 **SUBPART SSS –** Standards of Performance for Magnetic Tape Coating Facilities.
301.74 **SUBPART TTT –** Standards of Performance for Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines.
301.75 **SUBPART UUU –** Standards of Performance for Calciners and Dryers In Mineral Industries.
301.76 **SUBPART VVV –** Standards of Performance for Polymeric Coating of Supporting Substrates Facilities.
301.77 **SUBPART WWW –** Standards of Performance for Municipal Solid Waste Landfills.
301.78 **SUBPART AAAA –** Standards of Performance for Small Municipal Waste Combustion Units for which Construction is Commenced after August 30, 1999 or for which Modification or Reconstruction is Commenced after June 6, 2001.
301.79 **SUBPART CCCC –** Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for which Construction is Commenced after November 30, 1999 or for which Modification or Reconstruction is Commenced on or after June 1, 2001.
301.80 **SUBPART EEEE –** Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced after December 9, 2004, or for which Modification or Reconstruction is Commenced on or after June 16, 2006.
301.81 **SUBPART FFFF –** Emission Guidelines and Compliance Times for Other Solid Waste Incinerator Units that Commenced Construction on or before December 9, 2004.
301.82 **SUBPART IIII** – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
301.83 **SUBPART JJJJ** – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.
301.84 **SUBPART KKKK** – Standards of Performance for Stationary Combustion Turbines.

302 **ADDITIONAL REQUIREMENTS:** From the general standards identified in Section 301 of this rule, delete 40 CFR 60.4, 60.5, and 60.6. All requests, reports, applications, submittals, and other communications to the Control Officer pursuant to this rule shall be submitted to the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)

SECTION 500 – MONITORING AND RECORDS (NOT APPLICABLE)

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 370
FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM

INDEX

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MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 370
FEDERAL HAZARDOUS AIR POLLUTANT PROGRAM

SECTION 100 – GENERAL

101 **PURPOSE:** To establish emission standards for federally listed hazardous air pollutants.

102 **APPLICABILITY**: The provisions of this rule apply to the owner or operator of any stationary source for which a standard is prescribed under this rule, and for which federal delegation of the implementation and enforcement of the standards to the Maricopa County Air Quality Department (department) has been accomplished. Any such stationary source must also comply with other Maricopa County Air Pollution Control Regulations.

103 **AVAILABILITY OF INFORMATION:** Copies of all 40 CFR, Part 61 and Part 63 revisions currently enforced by the department are available electronically at: ecfr.gpoaccess.gov; at the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004; or by calling (602) 506-0169 for information. ASTM standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.

104 **FEDERAL DELEGATION AUTHORITY:** The department shall enforce the national emission standards for hazardous air (NESHAPs) (40 CFR 61 and 40 CFR 63) listed in Section 300 of this rule which have been delegated to the County by the United States Environmental Protection Agency (EPA) for such enforcement. The department in addition, may enforce such other NESHAPs as delegated for such enforcement by the EPA to the County.

SECTION 200 – DEFINITIONS: ~~See Rule 100 of these rules for definitions of terms that are used but not specifically defined in this rule.~~ For the purpose of this rule, the following definitions shall apply~~:~~ in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

201 **ADMINISTRATOR –** As used in Parts 61 and 63, Title 40, Code of Federal Regulations, shall mean the Control Officer, except that the Control Officer shall not be empowered to approve alternate or equivalent test methods, alternative standards/work practices, or other nondelegable authorities, except as specifically provided in each subpart.

202 **AMENDED WATER –** Water to which surfactant (wetting agent) has been added to increase the ability of the liquid to penetrate asbestos-containing material (ACM).

203 **EXISTING SOURCE** – Any stationary source other than a new source.

204 **FEDERALLY LISTED HAZARDOUS AIR POLLUTANT –** Any air pollutant listed pursuant to Section 112(b) of the Act.

205 **GOVERNMENT-ISSUED PHOTO IDENTIFICATION CARD –** Includes, but is not limited to, a valid driver's license, a valid non-operating identification license, a valid tribal enrollment card or tribal identification card, or other valid government issued photo identification that includes the name, address, and photograph of the card holder.

206 **HAZARDOUS AIR POLLUTANT –** Any air pollutant regulated under Section 112 of the Act, any air pollutant subject to NESHAP, or any air pollutant designated by the Director as a hazardous air pollutant pursuant to ARS § 49-426.04.

207 **MAJOR SOURCE –** A stationary source or group of stationary sources located within a contiguous area, and under common control, and that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any federally listed hazardous air pollutant or 25 tons per year or more of any combination of federally listed hazardous air pollutants. A lesser quantity or, in the case of radionuclides, a different criteria may be established by the Administrator pursuant to Section 112 of the Act and may be adopted by the Board of Supervisors by rule.

208 **MODIFICATION –** Any physical change in, or change in the method of operation of a major source which increases the actual emissions of any federally listed hazardous air pollutant emitted by such source by more than a de minimis amount, or which results in the emission of any federally listed hazardous air pollutant, not previously emitted by more than a de minimis amount.

209 **NESHAP –** National emission standards for hazardous air pollutants pursuant to 40 CFR Part 61 and Part 63.

210 **NEW SOURCE –** A stationary source, the construction or reconstruction of which commences after the Administrator first proposes regulations under Section 112 of the Act establishing an emission standard applicable to such source.

211 **STATIONARY SOURCE –** Any building, structure, facility, or installation which emits or may emit any air pollutant.

SECTION 300 – STANDARDS

301 **STANDARDS OF PERFORMANCE FOR FEDERALLY LISTED HAZARDOUS AIR POLLUTANTS:** The federally listed hazardous air pollutants as listed in Table 370.1 of this rule and NESHAPs adopted as of July 1, ~~2009~~ 2010, as listed below and as which can be found at 40 CFR 61 and all accompanying appendices, are incorporated by reference with the listed exclusions and additions and shall be applied by the Control Officer. This incorporation by reference includes no future editions or amendments. Each owner or operator subject to the requirements of the following subparts shall comply with the requirements of those subparts and the additional requirements set forth herein. Incorporation by reference does not include nondelegable functions of the EPA Administrator.

301.1 **SUBPART A –** General Provisions; exclude any sections dealing with equivalency determinations that are nontransferable through Section 112(e)(3) of the Act.

301.2 **SUBPART C –** National Emission Standard for Beryllium.

301.3 **SUBPART D –** National Emission Standard for Beryllium Rocket Motor Firing.

301.4 **SUBPART E –** National Emission Standard for Mercury.

301.5 **SUBPART F –** National Emission Standard for Vinyl Chloride.

301.6 **SUBPART J –** National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene.

301.7 **SUBPART L –** National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants.

301.8 **SUBPART M –** National Emission Standard for Asbestos.

a. Each owner or operator of a demolition activity or renovation activity involving a facility as defined in 40 CFR 61, Subpart M shall:

(1) Fully comply with all requirements of 40 CFR 61, Subpart M.

(2) Thoroughly inspect the facility within 12 months of commencement of demolition or renovation activity for the presence of asbestos, including Category I and Category II nonfriable ACM. Include the date of this inspection on the written notification.

(3) Provide the Control Officer with written notification of intention to demolish or to renovate in the manner described in 40 CFR 61.145.

(4) Update all notifications in accordance with 40 CFR 61.145(b). For renovations described in 40 CFR 61.145(a)(4)(iii), notifications shall expire every December 31, with new notices required at least 10 working days before the end of the calendar year preceding the year for which notice is being given. All other notifications shall expire one year from either the original postmark date or commercial delivery date or date of hand delivery to the Control Officer. For a demolition activity or renovation activity that continues beyond the expiration date, the owner or operator of the demolition or renovation activity shall notify the Control Officer in accordance with 40 CFR 61.145(b) at least 10 working days prior to the expiration of the original notice and pay all applicable fees prescribed by Rule 280 of these rules.

(5) Pay all applicable fees prescribed by Rule 280 of these rules.

b. In addition, each owner or operator of a demolition activity or renovation activity shall comply with the following requirements:

(1) Certification, training, and record keeping requirements:

(a) All facilities scheduled for demolition or renovation shall be inspected by a currently certified Asbestos Hazard Emergency Response Act (AHERA) accredited asbestos building inspector (herein referenced as inspector), as required by either AHERA or the Asbestos School Hazard Abatement Reauthorization Act (ASHARA).

(b) Each owner and operator of a facility shall maintain a copy of any reports of inspections made for a facility for two years from completion of project, including laboratory test results of samples collected. A copy of the inspection reports and laboratory test results shall be on-site and available for inspection at the facility, upon request of the Department, during all demolition and renovation (asbestos setup, removal, handling, collecting, containerizing, cleanup and dismantling) activities.

(c) All asbestos workers shall maintain current AHERA worker certification. All asbestos contractor/supervisors shall maintain current AHERA/ASHARA contractor/supervisor certification and shall be on-site at all times during any active asbestos abatement work at or above NESHAP threshold amounts. A legible copy of all asbestos workers and contractor/supervisor's current training certificates from an EPA accredited training provider shall be available for inspection at all times at the demolition or renovation site.

(d) All asbestos workers and contractor/supervisors shall have color photo identification on-site and available for inspection, upon request of the Department, at all times during asbestos setup, removal, handling, collecting, containerizing, cleanup and dismantling. The color photo identification shall be from an EPA accredited training provider verifying the certification requirements in section (b)(1)(c), or a current government-issued photo identification card.

(2) Asbestos renovation and demolition standards:

(a) A facility owner or operator shall not create visible dust emissions when removing or transporting to the disposal site Category I nonfriable asbestos-containing material (ACM) and Category II nonfriable ACM that remain nonfriable Category I ACM and nonfriable Category II ACM.

(b) Inspection viewing devices at facilities are required at all asbestos renovation projects where regulated asbestos-containing material (RACM) is being abated, except for roofing projects involving Category I nonfriable ACM and Category II nonfriable ACM exclusively. Viewing devices shall be so designed as to allow an inspector to view the facility from the outside, either through ports or by video monitoring.

(c) All exposed RACM subject to cutting or dismantling operations and all RACM being removed from a facility or a facility component shall be kept adequately wet by using amended water to control the release of asbestos fibers. The use of amended water will not be required in the case of an ordered demolition, as defined in 40 CFR 61.145(a)(3), where the debris is suspected to contain or is known to contain ACM , however ordered demolitions are subject to 40 CFR 61.145(c)(9). Specific exemptions are listed under 40 CFR 61.145(c)(3)(i)(A), 40 CFR 61.145(c)(3)(ii) and/or 40 CFR 61.145(c)(7)(i). To claim these exemptions, the owner or operator shall follow the requirements of 40 CFR 61.145(c)(3)(i)(B), 40 CFR 61.145(c)(3)(iii) and/or 61.145(c)(7)(ii) and (iii).

(d) All RACM shall be contained in transparent, leak-tight wrapping and shall remain adequately wet to prevent dust emissions during removal, transport, storage, and proper landfill disposal following local, county, state, and federal regulations. Affix a visible and legible label to each individual wrapping with the name of the site owner or operator and the name and address of the location that generated the RACM.

301.9 **SUBPART N –** National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants.

301.10 **SUBPART O –** National Emission Standard for Inorganic Arsenic Emissions from Primary Copper Smelters.

301.11 **SUBPART P –** National Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities.

301.12 **SUBPART V** – National Emission Standard for Equipment Leaks (Fugitive Emission Sources).

301.13 **SUBPART Y** – National Emission Standard for Benzene Emissions from Benzene Storage Vessels.

301.14 **SUBPART BB** – National Emission Standard for Benzene Emissions from Benzene Transfer Operations.

301.15 **SUBPART FF** – National Emission Standard for Benzene Waste Operations.

302 **STANDARDS OF PERFORMANCE FOR FEDERALLY LISTED HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES:** The federally listed hazardous air pollutants as listed in Table 370.1 of this rule and NESHAPs adopted as of July 1, ~~2009~~2010, as listed below and as which can be found at 40 CFR 63, and all accompanying appendices, are incorporated by reference, as applicable requirements, with the listed exclusions and additions and shall be applied by the Control Officer. This incorporation by reference includes no future editions or amendments. Each owner or operator subject to the requirements of the following subparts shall comply with the requirements of those subparts and the additional requirements set forth. Incorporation by reference does not include nondelegable functions of the EPA Administrator.

302.1 **SUBPART A** – General Provisions.

302.2 **SUBPART B –** Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j).

302.3	**SUBPART C –** List of Hazardous Air Pollutants, Petitions Process, Lesser Quantity Designations, Source Category List.
302.4	**SUBPART D** – Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants.
302.5	**SUBPART F** – National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry.
302.6	**SUBPART G –** National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater.
302.7	**SUBPART H –** National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.
302.8	**SUBPART I –** National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks.
302.9	**SUBPART J –** National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production.
302.10	**SUBPART L** – National Emission Standards for Coke Oven Batteries.
302.11	**SUBPART M –** National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.
302.12	**SUBPART N –** National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.
302.13	**SUBPART O –** Ethylene Oxide Emissions Standards for Sterilization Facilities.
302.14	**SUBPART Q –** National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers.
302.15	**SUBPART R** – National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations).
302.16	**SUBPART S –** National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.
302.17	**SUBPART T –** National Emission Standards for Halogenated Solvent Cleaning.
302.18	**SUBPART U –** National Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins.
302.19	**SUBPART W –** National Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production.
302.20	**SUBPART X –** National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting.
302.21	**SUBPART AA –** National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants.
302.22	**SUBPART BB –** National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants.
302.23	**SUBPART CC –** National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries.
302.24	**SUBPART DD –** National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations.
302.25	**SUBPART EE** – National Emission Standards for Magnetic Tape Manufacturing Operations.
302.26	**SUBPART GG –** National Emission Standards for Aerospace Manufacturing and Rework Facilities.
302.27	**SUBPART HH –** National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities.
302.28	**SUBPART JJ –** National Emission Standards for Wood Furniture Manufacturing Operations.
302.29	**SUBPART KK –** National Emission Standards for the Printing and Publishing Industry.
302.30	**SUBPART MM –** National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills.
302.31	**SUBPART OO** – National Emission Standards for Tanks – Level 1.
302.32	**SUBPART PP** – National Emission Standards for Containers.
302.33	**SUBPART QQ** – National Emission Standards for Surface Impoundments.
302.34	**SUBPART RR** – National Emission Standards for Individual Drain Systems.
302.35	**SUBPART SS** – National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.
302.36	**SUBPART TT** – National Emission Standards for Equipment Leaks – Control Level 1.
302.37	**SUBPART UU –** National Emission Standards for Equipment Leaks – Control Level 2 Standards.

302.38 **SUBPART VV –** National Emission Standards for Oil-Water Separators and Organic-Water Separators.
302.39 **SUBPART WW –** National Emission Standards for Storage Vessels (Tanks) – Control Level 2.
302.40 **SUBPART XX –** National Emission Standards for Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations.
302.41 **SUBPART YY –** National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards.
302.42 **SUBPART CCC –** National Emission Standards for Hazardous Air Pollutants for Steel Pickling – HCl Process Facilities and Hydrochloric Acid Regeneration Plants.
302.43 **SUBPART DDD –** National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production.
302.44 **SUBPART EEE –** National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors.
302.45 **SUBPART GGG –** National Emission Standards for Pharmaceuticals Production.
302.46 **SUBPART HHH** – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities.
302.47 **SUBPART III –** National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production.
302.48 **SUBPART JJJ** – National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins.
302.49 **SUBPART LLL** – National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry.
302.50 **SUBPART MMM** – National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production.
302.51 **SUBPART NNN** – National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing.
302.52 **SUBPART OOO –** National Emission Standards for Hazardous Air Pollutant Emissions: Manufacture of Amino/Phenolic Resins.
302.53 **SUBPART PPP –** National Emission Standards for Hazardous Air Pollutant Emissions for Polyether Polyols Production.
302.54 **SUBPART QQQ –** National Emission Standards for Hazardous Air Pollutants for Primary Copper Smelting.
302.55 **SUBPART RRR –** National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production.
302.56 **SUBPART TTT –** National Emission Standards for Hazardous Air Pollutants for Primary Lead Smelting.
302.57 **SUBPART UUU** – National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units.
302.58 **SUBPART VVV –** National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works.
302.59 **SUBPART XXX –** National Emission Standards for Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese.
302.60 **SUBPART AAAA** – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.
302.61 **SUBPART CCCC –** National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast.
302.62 **SUBPART DDDD** – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.
302.63 **SUBPART EEEE** – National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline).
302.64 **SUBPART FFFF –** National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.
302.65 **SUBPART GGGG** – National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production.
302.66 **SUBPART HHHH –** National Emission Standards for Hazardous Air Pollutants for Wet-Formed Fiberglass Mat Production.

302.67 **SUBPART IIII –** National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks.
302.68 **SUBPART JJJJ –** National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating.
302.69 **SUBPART KKKK –** National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans.
306.70 **SUBPART MMMM –** National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products.
302.71 **SUBPART NNNN –** National Emission Standards for Hazardous Air Pollutants: Surface Coating of Large Appliances.
302.72 **SUBPART OOOO –** National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles.
302.73 **SUBPART PPPP –** National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products.
302.74 **SUBPART QQQQ –** National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products.
302.75 **SUBPART RRRR –** National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Furniture.
302.76 **SUBPART SSSS –** National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Coil.
302.77 **SUBPART TTTT** – National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations.
302.78 **SUBPART UUUU –** National Emission Standards for Hazardous Air Pollutants for Cellulose Products Manufacturing.
302.79 **SUBPART VVVV –** National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing.
302.80 **SUBPART WWWW –** National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.
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302.82 **SUBPART YYYY –** National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.
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302.84 **SUBPART AAAAA** – National Emission Standards for Hazardous Air Pollutants for Lime Manufacturing Plants.
302.85 **SUBPART BBBBB –** National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing.
302.86 **SUBPART CCCCC –** National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks.
302.87 **SUBPART DDDDD –** National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters.
302.88 **SUBPART EEEEE –** National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries.
302.89 **SUBPART FFFFF –** National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities.
302.90 **SUBPART GGGGG** – National Emission Standards for Hazardous Air Pollutants: Site Remediation.
302.91 **SUBPART HHHHH –** National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing.
306.92 **SUBPART IIIII –** National Emission Standards for Hazardous Air Pollutants: Mercury Emissions from Mercury Cell Chlor-Alkali Plants.
302.93 **SUBPART JJJJJ –** National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing.
302.94 **SUBPART KKKKK** – National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing.
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302.96	**SUBPART MMMMM –** National Emission Standards for Hazardous Air Pollutants: Flexible Polyurethane Foam Fabrication Operations.
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302.100	**SUBPART RRRRR –** National Emission Standards for Hazardous Air Pollutants: Taconite Iron Ore Processing.
302.101	**SUBPART SSSSS –** National Emission Standards for Hazardous Air Pollutants for Refractory Products Manufacturing.
302.102	**SUBPART TTTTT** – National Emission Standards for Hazardous Air Pollutants for Primary Magnesium Refining.
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302.104	**Subpart YYYYY –** National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities.
302.105	**Subpart ZZZZZ –** National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources.
302.106	**Subpart BBBBBB** – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.
302.107	**Subpart CCCCCC** – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities.
302.108	**Subpart DDDDDD** – National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production Area Sources.
302.109	**Subpart EEEEEE** – National Emission Standards for Hazardous Air Pollutants: Primary Copper Smelting Area Sources.
302.110	**Subpart FFFFFF** – National Emission Standards for Hazardous Air Pollutants: Secondary Copper Smelting Area Sources.
302.111	**Subpart GGGGGG**--National Emission Standards for Hazardous Air Pollutants for Primary Nonferrous Metals Area Sources--Zinc, Cadmium, and Beryllium.
302.112	**Subpart HHHHHH –** National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources.
302.113	**Subpart LLLLLL**--National Emission Standards for Hazardous Air Pollutants for Acrylic and Modacrylic Fibers Production Area Sources.
302.114	**Subpart MMMMMM**--National Emission Standards for Hazardous Air Pollutants for Carbon Black Production Area Sources.
302.115	**Subpart NNNNNN**--National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources: Chromium Compounds.
302.116	**Subpart OOOOOO** – National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources.
302.117	**Subpart PPPPPP** – National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area.
302.118	**Subpart QQQQQQ** – National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area Sources.
302.119	**Subpart RRRRRR** – National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing Area Sources.
302.120	**Subpart SSSSSS** – National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources.
302.121	**Subpart TTTTTT** – National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources.
302.122	**Subpart VVVVVV** – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources.
~~**302.122**~~**302.123**	Subpart **WWWWWW** – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations.
~~**302.123**~~**302.124**	**Subpart XXXXXX** – National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories.

~~302.124~~**302.125** **Subpart YYYYYY** – National Emission Standards for Hazardous Air Pollutants for Area Sources: Ferroalloys Production Facilities.

~~302.125~~**302.126** **Subpart ZZZZZZ** – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Aluminum, Copper, and Other Nonferrous Foundries.

302.127 **Subpart AAAAAAA** – National Emission Standards for Hazardous Air Pollutants for Area Sources: Asphalt Processing and Asphalt Roofing.

302.128 **Subpart BBBBBBB** – National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry.

302.129 **Subpart CCCCCCC** – National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing.

302.130 **Subpart DDDDDDD** – National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing.

303 ADDITIONAL REQUIREMENTS:

303.1 From the general standards identified in Section 301 of this rule, delete 40 CFR 61.04. All requests, reports, applications, submittals, and other communications to the Control Officer pursuant to this rule shall be submitted to the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004.

303.2 Where the Act has established provisions, including specific schedules, for the regulation of source categories pursuant to Sections 112(e)(5) and 112(n) of the Act, the Control Officer may enforce those provisions.

303.3 For any category or subcategory of sources licensed by the U.S. Nuclear Regulatory Commission, the Board of Supervisors shall not adopt and the Control Officer shall not enforce any standard or limitation respecting emissions of radionuclides which is more stringent than the standard or limitation adopted by the Administrator pursuant to Section 112 of the Act.

303.4 If the Administrator finds by rule that regulation is not appropriate or necessary or that alternative control strategies should be applied, the Control Officer shall administer and enforce this rule based on the Administrator's findings.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

401 CONTROL TECHNOLOGY DETERMINATIONS FOR MAJOR SOURCES IN ACCORDANCE WITH CLEAN AIR ACT SECTIONS, SECTIONS 112(g) AND 112(j): 40 CFR 63.40 through 40 CFR 63.44 and 40 CFR 63.50 through 40 CFR 63.56 are adopted by reference.

402 COMPLIANCE EXTENSIONS FOR EARLY REDUCTION OF FEDERALLY LISTED HAZARDOUS AIR POLLUTANTS: 40 CFR 63.70 through 40 CFR 63.81 and Table 370.1 are adopted by reference.

SECTION 500 – MONITORING AND RECORDS (NOT APPLICABLE)

TABLE 370.1. FEDERAL LIST OF HAZARDOUS AIR POLLUTANTS

A. All of the following are federally listed hazardous air pollutants:

CAS No.	Chemical Name	CAS No.	Chemical Name
75-07-0	Acetaldehyde	100-44-7	Benzyl chloride
60-35-5	Acetamide	92-52-4	Biphenyl
75-05-8	Acetonitrile	117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)
98-86-2	Acetophenone	542-88-1	Bis(chloromethyl)ether
53-96-3	2-Acetylaminofluorene	75-25-2	Bromoform
107-02-8	Acrolein	106-99-0	1,3-Butadiene
79-06-1	Acrylamide	156-62-7	Calcium cyanamide
79-10-7	Acrylic acid	133-06-2	Captan
107-13-1	Acrylonitrile	63-25-2	Carbaryl
107-05-1	Allyl chloride	75-15-0	Carbon disulfide
92-67-1	4-Aminobiphenyl	56-23-5	Carbon tetrachloride
62-53-3	Aniline	463-58-1	Carbonyl sulfide
90-04-0	o-Anisidine	120-80-9	Catechol
1332-21-4	Asbestos	133-90-4	Chloramben
71-43-2	Benzene (including benzene from gasoline)	57-74-9	Chlordane
92-87-5	Benzidine	7782-50-5	Chlorine
98-07-7	Benzotrichloride	79-11-8	Chloroacetic acid

CAS No.	Chemical Name
532-27-4	2-Chloroacetophenone
108-90-7	Chlorobenzene
510-15-6	Chlorobenzilate
67-66-3	Chloroform
107-30-2	Chloromethyl methyl ether
126-99-8	Chloroprene
1319-77-3	Cresols/Cresylic acid (isomers and mixture)
95-48-7	o-Cresol
108-39-4	m-Cresol
106-44-5	p-Cresol
98-82-8	Cumene
94-75-7	2,4-D, salts and esters
3547-04-4	DDE
334-88-3	Diazomethane
132-64-9	Dibenzofurans
96-12-8	1,2-Dibromo-3-chloropropane
84-74-2	Dibutylphthalate
106-46-7	1,4-Dichlorobenzene(p)
91-94-1	3,3'-Dichlorobenzidene
111-44-4	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542-75-6	1,3-Dichloropropene
62-73-7	Dichlorvos
111-42-2	Diethanolamine
121-69-7	N,N-Diethyl aniline (N,N-Dimethylaniline)
64-67-5	Diethyl sulfate
119-90-4	3,3-Dimethoxybenzidine
60-11-7	Dimethyl aminoazobenzene
119-93-7	3,3-Dimethyl benzidine
79-44-7	Dimethyl carbamoyl chloride
68-12-2	Dimethyl formamide
57-14-7	1,1-Dimethyl hydrazine
131-11-3	Dimethyl phthalate
77-78-1	Dimethyl sulfate
534-52-1	4,6-Dinitro-o-cresol, and salts
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
123-91-1	1,4-Dioxane (1,4-Diethyleneoxide)
122-66-7	1,2-Diphenylhydrazine
106-89-8	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106-88-7	1,2-Epoxybutane
140-88-5	Ethyl acrylate
100-41-4	Ethyl benzene
51-79-6	Ethyl carbamate (Urethane)
75-00-3	Ethyl chloride (Chloroethane)
106-93-4	Ethylene dibromide (Dibromoethane)
107-06-2	Ethylene dichloride (1,2-Dichloroethane)
107-21-1	Ethylene glycol
151-56-4	Ethylene imine (Aziridine)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
75-34-3	Ethylidene dichloride (1,1-Dichloroethane)
50-00-0	Formaldehyde
76-44-8	Heptachlor
118-74-1	Hexachlorobenzene
87-68-3	Hexachlorobutadiene
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane
822-06-0	Hexamethylene-1,6-diisocyanate
680-31-9	Hexamethylphosphoramide
110-54-3	Hexane
302-01-2	Hydrazine
7647-01-0	Hydrochloric acid
7664-39-3	Hydrogen fluoride (Hydrofluoric acid)
123-31-9	Hydroquinone
78-59-1	Isophorone
58-89-9	Lindane (all isomers)
108-31-6	Maleic anhydride
67-56-1	Methanol
72-43-5	Methoxychlor
74-83-9	Methyl bromide (Bromomethane)
74-87-3	Methyl chloride (Chloromethane)
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)
60-34-4	Methyl hydrazine
74-88-4	Methyl iodide (Iodomethane)
108-10-1	Methyl isobutyl ketone (Hexone)
624-83-9	Methyl isocyanate
80-62-6	Methyl methacrylate
1634-04-4	Methyl tert butyl ether
101-14-4	4,4-Methylene bis (2-chloroaniline)
75-09-2	Methylene chloride (Dichloromethane)
101-68-8	Methylene diphenyl diisocyanate (MDI)
101-77-9	4,4'-Methylenedianiline
91-20-3	Naphthalene
98-95-3	Nitrobenzene
92-93-3	4-Nitrobiphenyl
100-02-7	4-Nitrophenol
79-46-9	2-Nitropropane
684-93-5	N-Nitroso-N-methylurea
62-75-9	N-Nitrosodimethylamine
59-89-2	N-Nitrosomorpholine
56-38-2	Parathion
82-68-8	Pentachloronitrobenzene (Quintobenzene)
87-86-5	Pentachlorophenol
108-95-2	Phenol
106-50-3	p-Phenylenediamine
75-44-5	Phosgene
7803-51-2	Phosphine
7723-14-0	Phosphorus
85-44-9	Phthalic anhydride
1336-36-3	Polychlorinated biphenyls (Aroclors)
1120-71-4	1,3-Propane sultone
57-57-8	beta-Propiolactone
123-38-6	Propionaldehyde
114-26-1	Propoxur (Baygon)
78-87-5	Propylene dichloride (1,2-Dichloropropane)
75-56-9	Propylene oxide
75-55-8	1,2-Propylenimine (2-Methylaziridine)
91-22-5	Quinoline
106-51-4	Quinone
100-42-5	Styrene

CAS No.	Chemical Name	CAS No.	Chemical Name
96-09-3	Styrene oxide	1330-20-7	Xylenes (isomers and mixture)
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	95-47-6	o-Xylenes
79-34-5	1,1,2,2-Tetrachloroethane	108-38-3	m-Xylenes
127-18-4	Tetrachloroethylene (Perchloroethylene)	106-42-3	p-Xylenes
7550-45-0	Titanium tetrachloride	0	Antimony Compounds
108-88-3	Toluene	0	Arsenic Compounds inorganic including arsine)
95-80-7	2,4-Toluene diamine		
584-84-9	2,4-Toluene diisocyanate	0	Beryllium Compounds
95-53-4	o-Toluidine	0	Cadmium Compounds
8001-35-2	Toxaphene (chlorinated camphene)	0	Chromium Compounds
120-82-1	1,2,4-Trichlorobenzene	0	Cobalt Compounds
79-00-5	1,1,2-Trichloroethane	0	Coke Oven Emissions
79-01-6	Trichloroethylene	0	Cyanide Compounds[1]
95-95-4	2,4,5-Trichlorophenol	0	Glycol ethers[2]
88-06-2	2,4,6-Trichlorophenol	0	Lead Compounds
121-44-8	Triethylamine	0	Manganese Compounds
1582-09-8	Trifluralin	0	Mercury Compounds
540-84-1	2,2,4-Trimethylpentane	0	Fine mineral fibers[3]
108-05-4	Vinyl acetate	0	Nickel Compounds
593-60-2	Vinyl bromide	0	Polycyclic Organic Matter[4]
75-01-4	Vinyl chloride	0	Radionuclides (including radon)[5]
75-35-4	Vinylidene chloride (1,1-Dichloroethylene)	0	Selenium Compounds

B. The following applies for all listings above which contain the word "compounds" or are glycol ethers: unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

[1] X'CN where X = H' or any other group where a formal dissociation may occur (e.g. KCN or Ca(CN)2).

[2] a. Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-$(OCH_2CH_2)_n$-OR' where:
n = 1, 2, or 3;
R = alkyl C7 or less; or
R = phenyl or alkyl substituted phenyl;
R' = H or alkyl C7 or less; or
OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.

b. Glycol ethers do not include ethylene glycol monobutyl ether (EGBE, 2-Butoxyethanol) (CAS No. 111-76-2).

[3] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter one micrometer or less.

[4] Includes organic compounds which have more than one benzene ring and which have a boiling point greater than or equal to 212 ºF (100 ºC).

[5] A type of atom which spontaneously undergoes radioactive decay.

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 371
ACID RAIN

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302 FEDERAL REGULATORY REVISIONS

SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)

SECTION 500 – MONITORING AND RECORDS (NOT APPLICABLE)

Adopted 02/15/95
Revised 04/03/96
Revised 03/01/00
Revised 03/07/01
Revised 11/19/03
Revised 03/15/06
Revised 12/17/08
Revised 09/16/09
Revised 07/07/10
Revised 08/17/11

MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 371
ACID RAIN

SECTION 100 – GENERAL

101 **PURPOSE:** To incorporate by reference the Acid Rain federal regulations in order to obtain delegated authority to enforce portions of the Clean Air Act Amendments of 1990 (CAAA).

102 **APPLICABILITY:** This rule applies to those affected units as described in 40 Code of Federal Regulations (CFR) 72.6 which has been adopted by reference and no future additions or amendments. Any such stationary source must also comply with other Maricopa County Air Pollution Control Regulations.

103 **SEVERABILITY:** If the provisions or requirements of the regulations incorporated pursuant to this rule conflict with any of the remaining portions of these rules, the regulations incorporated pursuant to this rule shall apply and shall take precedence.

104 **AVAILABILITY OF INFORMATION:** Copies of 40 CFR Part 72 (Permits Regulation), 40 CFR Part 74 (Sulfur Dioxide Opt-Ins), 40 CFR Part 75 (Continuous Emission Monitoring), and 40 CFR 76 (Acid Rain Nitrogen Oxides Emission Reduction Program) and all accompanying appendices currently enforced by the department are available electronically at: ecfr.gpoaccess.gov; at the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004; or by calling (602) 506-0169 for information. ASTM standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.

105 **FEDERAL DELEGATION AUTHORITY:** The department shall enforce the Federal Acid Rain Regulations which have been delegated to the County by the United States Environmental Protection Agency (EPA) for such enforcement. The department may, in addition, enforce such other Acid Rain Rules as delegated for such enforcement by the EPA to the County.

SECTION 200 – DEFINITIONS: See Rule 100 (General Provisions and Definitions) of these rules for definitions of terms that are used but not specifically defined in this rule.

SECTION 300 – STANDARDS

301 **INCORPORATED SUBPARTS OF THE FEDERAL ACID RAIN REGULATIONS:** 40 CFR Parts 72, 74, 75 and 76 and all accompanying appendices, adopted as of July 1, ~~2009~~ 2010, (and no future additions or amendments) are incorporated by reference as applicable requirements.

302 **FEDERAL REGULATORY REVISIONS:** The Maricopa County Board of Supervisors shall take action following promulgation by the Environmental Protection Agency (EPA) of regulations implementing Section 407 and Section 410 of the Clean Air Act (CAA), or revising either Part 72, 74, 75, and/or 76 of the regulations implementing Section 407 or Section 410 of the CAA, to either incorporate such new or revised provisions by

reference or to submit, for the EPA approval, the Maricopa County Air Pollution Control Regulations implementing these provisions.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS (NOT APPLICABLE)

SECTION 500 – MONITORING AND RECORDS (NOT APPLICABLE)

Adopted 03/15/06
Revised 12/17/08
Revised 09/16/09
Revised 07/07/10
Revised 08/17/11

MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS

APPENDIX G
Incorporated Materials

1. The following test methods, protocols, federal interpretations, guidelines, and appendices located in Title 40, Code of Federal Regulations (CFR) are approved for use as directed by the department under the Maricopa County Air Pollution Control Regulations. These standards are incorporated by reference ~~revised~~ as of July 1, ~~2009~~ 2010, and no future editions or amendments.
- **a.** 40 CFR 50;
- **b.** 40 CFR 50, Appendices ~~A-O;~~ A-1, A-2, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, and T;
- **c.** 40 CFR 51, Appendix M; Appendix S, Section IV; and Appendix W;
- **d.** 40 CFR 52, Appendices D and E;
- **e.** 40 CFR 53;
- **f.** 40 CFR 58;
- **g.** 40 CFR 58, Appendices A, C, D, E, and G;
- **h.** 40 CFR 60, Appendices A-1, A-2, A-3, A-4, A-5, A-6, A-7, A-8, B, C, D, F, G, and I ;
- **i.** 40 CFR 61, Appendices A, B, C, D, and E;
- **j.** 40 CFR 63, all appendices; and
- **k.** 40 CFR 75, Appendices A, B, C, D, E, F, G, and K.

2. The following documents are incorporated by reference and are approved for use as directed by the department under the Maricopa County Air Pollution Control Regulations. These documents are incorporated by reference as of the year specified below, and no future editions or amendments.
- **a.** The Arizona Department of Environmental Quality's (ADEQ) "Arizona Testing Manual for Air Pollutant Emissions," amended as of March 1992, and no future editions or amendments.
- **b.** All ~~American Society for Testing and Materials~~ ASTM International (ASTM) ~~test~~ methods standards referenced in the Maricopa County Air Pollution Control Regulations as of the year specified in the reference, and no future editions or amendments.
- **c.** The U.S. Government Printing Office's "Standard Industrial Classification Manual, 1987", published by the Executive Office of the President, Office of Management and Budget, and no future editions or amendments.
- **d.** EPA Publication No. AP-42, 1995, "Compilation of Air Pollutant Emission Factors," Volume I: Stationary Point and Area Sources, Fifth Edition, including Supplements A, B, C, D, E, F, Updates 2001, 2002, 2003, and 2004 and all updates as of July 1, ~~2009~~ 2010, and no future editions or amendments.
- **e.** EPA guidance document "Guidelines for Determining Capture Efficiency", January 9, 1995, and no future editions or amendments.
- **f.** 2002 US NAICS Manual, "North American Industry Classification System United States", National Technical Information Service, US Census Bureau, 2002, and no future editions or amendments.

3. The following federal regulations located in Title 40, Code of Federal Regulations (CFR) are approved for use as directed by the department under the Maricopa County Air Pollution Control Regulations. These standards are incorporated by reference ~~revised~~ as of July 1, ~~2009~~ 2010, and no future editions or amendments.
- **a.** The Consolidated Emissions Reporting Rule in 40 CFR 51, Subpart A, Appendix A, Table 2A.
- **b.** 40 CFR 75.

Availability of Information: Copies of these incorporated materials are available electronically at: ecfr.gpoaccess.gov; at the Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ, 85004; or

by calling (602) 506-0169 for information. ASTM standards are available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.

NOTICE OF FINAL RULEMAKING

MARICOPA COUNTY AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

[M11-311]

PREAMBLE

1. Rule affected | **Rulemaking action**
Rule 337: Graphic Arts | Amend

2. Statutory authority for the rulemaking:
Authorizing statutes: A.R.S. §§ 49-474, 49-479, and 49-480

Implementing statute: A.R.S. § 49-112

3. The effective date of the rule:
August 17, 2011

4. List of all previous notices appearing in the Register addressing the rulemaking:
Notice of Rulemaking Docket Opening: 17 A.A.R. 627, April 22, 2011

Notice of Proposed Rulemaking: 17 A.A.R. 627, April 22, 2011

Notice of Public Information: 17 A.A.R. 702, April 29, 2011

5. The name and address of department personnel with whom persons may communicate regarding the rulemaking:

Name: Cheri Dale

Address: Planning and Analysis Division
Maricopa County Air Quality Department
1001 N. Central Ave., Suite 595
Phoenix, AZ 85004

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6. An explanation of the rule, including the department's reasons for initiating the rulemaking:
The Maricopa County Air Quality Department regulates emissions of volatile organic compounds (VOCs) from graphic arts operations through Maricopa County Air Pollution Control Regulation III, Rule 337 (Graphic Arts). "Graphic arts" include, but are not limited to, any digital, screen, gravure, letterpress, flexographic and lithographic printing process, including any related coating and laminating processes. Rule 337 is an industry-specific rule designed to limit emissions of VOCs to the ambient air from the use of inks, coatings, adhesives, fountain solutions, and cleaning materials from graphic arts operations.

The Maricopa County Board of Supervisors adopted a revised version of Rule 337 (Graphic Arts) on January 12, 2011 (17 A.A.R. 324, March 4, 2011). Thereafter, it was discovered that certain technical corrections (described below) were required.

Background:
The department made technical corrections to the rule adopted by the Maricopa County Board of Supervisors on January 12, 2011. These technical corrections did not change either the standards established by Rule 337, or the level of health protection provided to the community. In addition, the department clarified language describing the applicability of certain compliance standards.

Description of Amendments:
- Corrected the formula used to calculate VOC composite partial vapor pressure. The formula found in Section 503.4 of the previous rule did not take into account materials that contained multiple exempt component

compounds. Only by considering all of the exempt compounds in a material, can a graphic arts operation accurately calculate the composite partial vapor pressure of a material. The department amended the formula to include a summation symbol in front of the second term in the denominator.

- Amended Section 503.2 to refer to a temperature "monitoring" device rather than a temperature "control" device. The amendment made the language in Section 503.2 of the rule consistent with that in Section 501.2(b) requiring the use of a "temperature monitoring device."
- Amended Section 502.4(b) to read "If the ECS was not operational due to equipment malfunction or not being used at any time during the day, record this fact in the permanent record." In the Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011), the department stated that Section 502.4(b) would be amended to reflect a comment received from the printing industry. However, through a clerical error, the amended language was not incorporated into the text of the rule adopted by the Board on January 12, 2011.
- Amended Section 305.1(a) to clarify that the intent of the section is to limit VOC emissions and not VOC content of a material. The amendment clarified that the use of a substrate retention factor can be applied when calculating emissions, as is provided in Section 103.2 of the rule.
- Amended Sections 103.2 and 502.2 to improve clarity.
- Corrected any typographical or other clerical errors; made minor grammatical changes to improve readability or clarity; modified the format, numbering, order, capitalization, punctuation, or syntax of certain text to increase standardization within and among rules; made various other minor changes of a purely editorial nature. As these changes did not alter the sense, meaning, or effect of the rule, they were not described in detail here, but are readily discerned in the "strikeout and underline" version of the rule contained in Item 17 of this notice.

7. Demonstration of compliance with A.R.S. § 49-112:

When authorized by law, a county may adopt a rule, ordinance, or other regulation that is more stringent than or in addition to a provision of this title or rule adopted by the director or any board or commission authorized to adopt rules pursuant to this title if all the following conditions are met:

a. The rule, ordinance or other regulation is necessary to address a peculiar local condition.
b. There is credible evidence that the rule, ordinance or other regulation is either:
   (1) Necessary to prevent a significant threat to public health or the environment that results from a peculiar local condition and is technically and economically feasible, or
   (2) Required under a federal statute or regulation, or authorized pursuant to an intergovernmental agreement with the federal government to enforce federal statutes or regulations if the county rule, ordinance, or other regulation is equivalent to federal statutes or regulations.

This rulemaking made technical corrections to the text of the rule adopted by the Board of Supervisors on January 12, 2011. The Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) contains detailed information demonstrating the rule's compliance with A.R.S. § 49-112.

8. A reference to any study relevant to the rule that the department reviewed and either proposes to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

This rulemaking made technical corrections to the text of the rule adopted by the Board of Supervisors on January 12, 2011. The Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) contains detailed information concerning the studies referenced in that rulemaking.

9. A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision:

Not applicable.

10. Summary of the economic, small business, and consumer impact:

The entities potentially affected by the rule revisions are lithographic, letterpress, rotogravure, flexographic, screen printing operations and any other graphic arts operations. Maricopa County is the implementing government entity for the proposed rule. These technical corrections did not change the standards established by the rule or the level of health protection provided. The Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) contains detailed information concerning the economic, small business, and consumer impact of that rulemaking.

11. Name and address of department personnel with whom persons may communicate regarding the accuracy of the economic, small business, and consumer impact statement:

Name: Cheri Dale

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Maricopa County Air Quality Department
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Phoenix, AZ 85004

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12. Description of the changes between the proposed rules, including supplemental notices and final rules:

Since the notice of proposed rulemaking was published on April 22, 2011, (17 A.A.R. 627) and April 29, 2011 (17 A.A.R. 702), the department made the following additional amendments:

- **Section 103.1.b:** Revised the wording to read "Coating applications that are considered coating operations but are not performed in association with a printing operation." to improve the clarity.
- **Section 302.1:** Re-inserted the phrase "less water and non-precursor organic compound" to clarify that water and non-precursor organic compounds are not included when determining the VOC content of materials applicable to this section.
- **Section 401.1:** Deleted the wording "(3 months after date of rule adoption)" that was inadvertently left unchanged in the Notice of Final Rulemaking (17 A.A.R. 353, March 4, 2011). Inserted the applicability date of April 12, 2011, which was three months after the date of the January 12, 2011, rule adoption.
- **Section 401.2:** Deleted the wording "(12 months after date of rule adoption)" that was inadvertently left unchanged in the Notice of Final Rulemaking (17 A.A.R. 353, March 4, 2011). Inserted the applicability date of January 12, 2012 which is 12 months after the date of the January 12, 2011, rule adoption.
- **Section 503:** Changed the organizational name of the "American Society for Testing and Materials" (ASTM) to "ASTM International" to reflect the current official name of the organization; and changed the wording "ASTM methods" to "ASTM standards."
- **Section 503.1(c)(1):** Updated the ASTM standard from ASTM E100 – 05 Standard Specification for ASTM Hydrometers to the currently active standard, ASTM E100 – 10 Standard Specification for ASTM Hydrometers.
- **Section 503.1.a:** Corrected the appendix number for the EPA Reference from "Appendix A" to "Appendix A-7."
- **Section 503.3.a(3):** Corrected the appendix number for the EPA Reference from "Appendix A" to "Appendix A-6."
- **Section 503.3.a(4):** Corrected the appendix number for the EPA Reference from "Appendix A" to "Appendix A-7."
- **Section 503.4(d):** Corrected the formula of VOC composite partial vapor pressure by deleting the summation sign from in front of the entire formula; inserted a summation sign in the numerator; inserted a summation sign for the second term of the denominator; and changed the "i=1" to "c=1" because the summation is of the exempt compounds and not the summation of all the compounds. The original formula has a diagonal line through it to indicate a strikeout. The corrected formula is directly below the diagonal struck-out formula.

13. A summary of the comments made regarding the rule and the department response to them:

The department did not conduct any public workshops during the technical revision rulemaking process. No oral proceeding was requested prior to 5:00 pm, May 23, 2011. After the publication of the Notice of Proposed Rulemaking in the Arizona Administrative Register (17 A.A.R. 627, April 22, 2011), the department received formal comments on May 10, 2011, from one stakeholder, the Printing Industries of Arizona/New Mexico (PIAZ/NM).

Formal comments submitted to the department are summarized below. A copy of the complete text of the submitted comments can be obtained by contacting the department as indicated in Item 5of this document. The department's responses to the submitted comments to Rule 337 (Graphic Arts) are included below:

Comment #1 re: Section 103.2(a) Applicability: It is unclear how the Department determined that the 225 pounds per month is equivalent to the previous exemption, which is based on press size. In its previous comments, PIAZ/NM requested that the applicability threshold be set at 3 tons of actual VOC emissions per 12 month rolling period, which is consistent with the 2006 CTG. PIAZ/NM demonstrated in a March 22, 2010 supplemental letter submitted by Gary Jones of Printing Industries of America that a 3 ton per year or 500 pound per month threshold is more stringent than the previous exemption for presses with less than 2 units or 500 square inches. Therefore, PIAZ/NM respectfully repeats the request to change the exemption from 225 pounds per month to 500 pounds per month. This limit is stricter than the exemption in the previous rule at 306.2 (b).

Response #1: Rule 337 was re-opened to address technical corrections. Please refer to the Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) response #3 for details concerning this comment.

Comment #2 re: Section 302.1 Lithographic and Letterpress Operations: PIAZ/NM supports the Department in the changes made to clarify this Section, but the removal of the phrase "less water and non-precursor organic compound" does not serve that purpose. Water and non-precursor organic compounds should not be included in the 2.5 lbs/gal VOC limit for inks, varnishes, coatings, or adhesives. These items do not contribute to ozone formation. The Department needs to make it clear that when assessing the VOC content of these materials, water and non-precursor organic compounds are not included.

Response #2: The department re-inserted the phrase "less water and non-precursor organic compound" to clarify that water and non-precursor organic compounds are not included when determining the VOC content of materials applicable to this section.

Comment #3 re: Table 337-2 ECS Control Efficiencies for Lithographic and Letterpress Printing Operations: In the Department's response to PIAZ/NM's August 18, 2010 comment letter, it indicated that the previous rule does not allow for any exemptions from the 90% destruction efficiency of ECS systems used in the graphic arts. However, the recently approved rule created a 95% destruction efficiency requirement that is more stringent for presses installed after the rule becomes effective. Since the CTG recommends exemptions for heatset web presses that are less than 22 inches in width or are used to print books, the rule can and should allow for an exemption from the more stringent 95% destruction efficiency requirement for such presses. These presses would still be subject to the 90% destruction efficiency as required by the previous rule.

Response #3: Rule 337 was re-opened to address technical corrections. Please refer to the Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) response #17 for details concerning this comment.

Comment #4 re: Section 306 Work Practices – Storage Handling and Disposal of VOC-Containing Material: PIAZ/NM is concerned about the extent to which the Maricopa County Graphic Arts rule Section 306 Work Practices is applied. Significant penalties were issued for alleged violations that are impractical and inconsistent with the intent of the Section 306's requirements. As such, there are several changes that are needed in order to present practical work practices that prevent overly burdensome requirements which provide for little or no reduction of VOC emissions. PIAZ/NM requests:

- An exemption for empty containers that once contained a VOC-containing material, even if there is residual material remaining in the container.
- The adoption or reference of the definition of an "empty" container as defined by RCRA in 40 CFR 261.7.
- Recognizing floating lids as an approved cover for a container.
- An exemption from work practices for lithographic inks and materials with a vapor pressure below 0.1 mmHg at 20^{o}C.

Response #4: Rule 337 was re-opened to address technical corrections. At this time, the department is addressing only the technical corrections to Rule 337. However, the department will note PIAZ/NM's concern regarding defining "empty containers" and will consider the issue in future rulemakings.

Comment #5 re: Section 502.2 Material Usage Records for Graphic Arts Materials and Cleaning Solutions: PIAZ/NM appreciates the changes made to Sections 502.2 (a) and (b), as they greatly improve the clarity of the requirements of this section. However, PIAZ/NM would like to reiterate our concern that daily recordkeeping poses a significant and unacceptable administrative burden, is virtually impossible to achieve, and produces extremely inaccurate results.

Response #5: Rule 337 was re-opened to address technical corrections. Please refer to the Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) response #28 for details concerning this comment.

Comment #6 re: Section 503.3 Emission Testing: In the Department's response to comments, it disagreed with modifying an approved EPA testing method. However, in the model rule, which EPA has found to be consistent with the CTG, EPA has acknowledged and approved the following modifications for the printing industry. Section 503.3 needs to be modified to clarify the conditions in which compliance tests need to be conducted.

Response #6: Rule 337 was re-opened to address technical corrections. Please refer to the Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) responses # 34 and #35.

Comment #7 re: Additional Calculation Information: The Department explained in its response to comments that the material use information provided by PIAZ/NM was rejected because it allowed for further exemptions not

included in the previous rule. PIAZ/NM appreciates that the department may not make the rule less stringent than the previous rule. The inclusion of material use factors commensurate with the emission threshold as an alternative would not make the rule less stringent and in fact, would in fact provide a level of conservatism that makes the material use approach more stringent that the current emission limits. Therefore, PIAZ/NM repeats its request for the inclusion of material use factors, based on the existing limits and exemptions in the current rule.

Response #7: Please refer to the Notice of Final Rulemaking (17 A.A.R. 324, March 4, 2011) response nos. 7, 13, 14 and 27 for details concerning this comment.

14. Any other matters prescribed by the statute that are applicable to the specific department or to any specific rule or class of rules:

Not applicable

15. Incorporations by reference and their location in the rules:

EPA Reference Methods, ASTM International (ASTM) standards and other documents incorporated by reference in Rule 337:

Section 503.1:

- Method 24 – Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings.
- Method 24A – Determination of Volatile Matter Content and Density of Publication Rotogravure Inks and Related Publication Rotogravure Coatings.
- ASTM E100 – 10 Standard Specifications for ASTM Hydrometers.
- ASTM E126 – 05a Standard Test Method for Inspection, Calibration, and Verification of ASTM Hydrometers.

Section 503.2:

- ASTM E1 – 07 Standard Specifications for ASTM Liquid-in-Glass Thermometers.

Section 503.3:

- "Guidelines for Determining Capture Efficiency" January 9, 1995, Candace Sorrell, Source Characterization Group A, Office of Air Quality Planning and Standards, US EPA.
- EPA Reference Method 18 – Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, 40 CFR 60, Appendix A–6.
- EPA Reference Method 25 – Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, 40 CFR 60, Appendix A–7; or applicable Subparts 25A, or 25B.
- EPA Reference Method 204 – Criteria for and Verification of a Permanent or Temporary Total Enclosure, 40 CFR 51, Appendix M; or applicable Subparts 204A, 204B, 204C or 204D.

Section 503.4:

- ASTM D2879 – 97(2007) Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope.

16. Was this rule previously an emergency rule?

No

17. The full text of the rule follows:

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 337
GRAPHIC ARTS

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Adopted 04/06/92
Revised 04/03/96
Revised 11/20/96
Revised 01/12/11

Revised 08/17/11

MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS

REGULATION III – CONTROL OF AIR CONTAMINANTS

RULE 337
GRAPHIC ARTS

SECTION 100 – GENERAL

101 PURPOSE: To limit the emissions of volatile organic compounds (VOCs) to the ambient air from graphic arts operations.

102 APPLICABILITY: This rule applies to all VOC-containing materials associated with graphic arts operations. This includes, but is not limited to the prepress and press operations; and the cleaning materials and processes associated with such operations.

103 EXEMPTIONS:

103.1 Total Categorical Exemptions: This rule does not apply to the following operations:

a. Circuitry printing and other associated printing performed for labeling, logo, or identification purposes on a printed circuit, its substrate, its immediate covering, or its immediate encapsulant by a circuitry printer.

b. Coating applications that are considered coating operations but ~~that~~ are not performed in association with a printing operation. ~~and that are considered coating operations are not graphic arts printing operations.~~

c. Printing conducted on office and personal printers such as ink jet, bubble jet, and laser printers.

103.2 Partial Exemptions: Sections 302.1, 303.1, 304.1 and 305.1(a) of this rule do not apply to any graphic arts operation whose total VOC emissions from all graphic arts and related coating operations prior to control are less than 25 tons per calendar year and 4,200 pounds per month. Except as otherwise directed by air pollution permit, any graphic arts operation that becomes subject to the provisions of Section 302.1 of this rule by exceeding either the monthly or yearly threshold amounts shall remain subject to these provisions even if monthly or annual emissions later fall back below these thresholds. ~~For the purpose of determining exemptions, the following substrate retention factors shall be applied: 20% retention of the VOC content of heatset inks and 95% retention of the VOC content of non-heatset inks.~~ The following are exempt from the VOC limitations of this rule but shall comply with the work practices listed in Section 306 of this rule and the recordkeeping requirements in Section 502.5 of this rule~~:~~ For the purpose of determining exemptions, VOC substrate retention factors of not more than 20% (for heatset inks) or 95% (for non-heatset inks) shall be applied.

a. ~~The total emissions from graphic~~ Graphic arts operations, including surface preparation and cleanup solvent, ~~does not~~ that do not exceed a threshold limit of 225 pounds (100 kg) of VOC per month before controls.

b. Any radiation-cured inks and coatings.

c. Any digital printing operation.

d. ~~Sections 302.1, 303.1, 304.1 and 305.1(a) of this rule do not apply to any graphic arts operation which emits less than the threshold amounts of 25 tons (22,680 kg) per calendar year and 4,200 pounds (1,909 kg) per month of VOC from all graphic arts and related coating operations prior to control. Except as otherwise directed by air pollution permit, any graphic arts operation that becomes subject to the provisions of Section 302.1 of this rule by exceeding either the monthly or yearly threshold amount shall remain subject to these provisions even if monthly or annual emissions later fall below the thresholds.~~

SECTION 200 – DEFINITIONS: For the purpose of this rule, the following definitions shall apply, in addition to those definitions found in Rule 100 (General Provisions and Definitions) of these rules. In the event of any inconsistency between any of the Maricopa County air pollution control rules, the definitions in this rule take precedence.

201 ADHESIVE – A material applied for the primary purpose of bonding two surfaces together by surface attachments. Adhesives may be used to facilitate the attachment of two surfaces or substances in varying degrees of permanence.

202 ALCOHOL – A volatile organic compound – such as isopropanol, normal-propanol, or ethanol – of alkane structure consisting of fewer than six carbon atoms and having a single OH– (hydroxyl) group and no other non-alkane attachments.

203 **ALCOHOL SUBSTITUTE –** A wetting agent, used to replace some or all of the alcohol in fountain solutions, and usually containing volatile organic compounds such as glycols and glycol ethers.

204 **BATCH –** A supply of fountain solution or cleaning solution that is prepared and used without alteration until completely used or removed from the printing process. For the purpose of this rule, this term may apply to solutions prepared in either discrete solutions or solutions that are continuously blended with automatic mixing units.

205 **CIRCUITRY PRINTING –** Any graphic arts operation which either uses ink(s) with specific electrical properties to print an electrical circuit, or prints a circuit pattern that is made into an electrical circuit through further processing.

206 **CLEANING SOLUTION –** Any liquid, including automatic blanket and roller wash system or manual blanket wash and roller wash, used to remove ink and debris from the operating surfaces of a printing press or from any of the attached parts of a press.

207 **DIGITAL PRINTING –** A method of printing that does not use a physical master, stencils or plates but uses an electronic output device to transfer variable data, in the form of an image, from a computer to a variety of substrates. Digital printing methods include, but are not limited to, inkjet printing, electrophotographic printing, dye sublimation printing, thermal wax printing and solid ink printing.

208 **EMISSION CONTROL SYSTEM (ECS) –** A system for reducing emissions of organic compounds, consisting of both collection and control devices ~~which~~ that are approved in writing by the Control Officer and are designed and that are operated in accordance with good engineering practice.

209 **EXTREME PERFORMANCE –** An ink or coating used in screen printing on a non-porous substrate that is designed to resist or withstand ~~any~~ either of the following:

209.1 More than two years of outdoor exposure; or

209.2 Exposure to industrial-grade chemicals, solvents, acids, detergents, oil products, cosmetics, temperatures exceeding 170 °F, vacuum-forming, embossing or molding.

210 **FLEXOGRAPHIC PRINTING –** The application of words, designs or pictures by a roll-printing technique in which the image-carrying surface is raised above the surface of the printing roll and the image carrier is made of flexible rubber or other elastomeric material. The image is transferred to the substrate through first applying ink to a smooth roller which in turn transfers the ink onto the raised pattern of the rubber or elastomeric image carrier fastened around a second roller, which then transfers the ink onto the substrate.

211 **FOUNTAIN SOLUTION –** The solution applied to the image plate to maintain the hydrophilic properties of the non-image areas, and to keep the non-image areas free from ink.

212 **GRAPHIC ARTS –** All printing processes including but not limited to digital, screen, gravure, letterpress, flexographic and lithographic printing processes, including related coating and laminating processes.

213 **GRAPHIC ARTS COATING –** A relatively unbroken layer of material applied onto or impregnated into a substrate. A material applied after the application of inks to the substrate that serves to enhance or protect the printed substrate and includes graphic arts varnish, water-based, or radiation-cured formulation of resins, solvents, cosolvents and other additives. Equipment capable of both coating and printing is considered a "printing operation" for this rule. Coating applications that are not performed in association with a printing operation are considered coating operations and ~~are~~ not "graphic arts ~~printing~~ operations".

214 **GRAPHIC ARTS ~~OPERATION~~ MATERIAL –** ~~All the graphic arts processes and activities which are located on one or more contiguous or adjacent properties and are under the control of the same person (or persons under common control).~~ Any ink, varnish, coating or adhesive, including added thinner or retarder, used in printing or related coating or laminating processes.

215 **GRAPHIC ARTS ~~MATERIAL~~ OPERATION –** ~~Any ink, varnish, coating or adhesive, including added thinner or retarder, used in printing or related coating or laminating processes.~~ All the graphic arts processes and activities which are located on one or more contiguous or adjacent properties and are under the control of the same person (or persons under common control).

216 **GRAVURE PRINTING –** An intaglio process in which ~~the~~ ink is carried in minute, etched, or engraved wells on a roll or cylinder. Images are transferred onto a substrate through first applying ink to the etched roll or cylinder, wiping the lands between the cells free of ink with a doctor blade, and rolling the cylinder over the substrate so that the surface of the substrate is pressed into the cells, transferring the ink onto the substrate.

217 **HEATSET –** A lithographic web printing process where heat is used to evaporate ink oils from the printing ink.

218 **LETTERPRESS PRINTING –** A method in which the image area is raised relative to the non-image area and the ink is transferred to the paper directly from the image surface.

219 **LITHOGRAPHIC PRINTING –** A planographic method of printing where the image and non-image areas of the printing plate are chemically differentiated; the image area is oil-receptive and the non-image area is water-receptive. This method differs from other printing methods, where the image is on a raised or recessed surface.

220 **NON-HEATSET –** A lithographic printing process where the printing inks are set by absorption or oxidation of the ink oils. For the purpose of this rule, use of an infrared heater or printing conducted using radiation-cured inks is considered non-heatset.

221 **NON-POROUS SUBSTRATE –** Any substrate whose surface prevents penetration by water.

222 **OFFSET LITHOGRAPHIC PRINTING –** A planographic method of printing in which the image and non-image areas are on the same plane and the ink is transferred from a plate to an intermediary surface, typically a rubber blanket, which in turn transfers the image to the substrate. "Offset lithographic printing" includes the application of overprint coatings.

223 **OVERALL CONTROL EFFICIENCY –** The overall control efficiency of an ECS is determined by multiplying the ECS efficiency by the destruction efficiency of the control device expressed as a percentage.

224 **POROUS SUBSTRATE –** A substrate whose surface does not prevent penetration by water.

225 **PRINTING OPERATION –** An operation that imparts color, design, pattern, alphabet or numerals onto a substrate. It differs from coating in that its principal intent is to accomplish such visual/spatial outcome(s) rather than for other purposes commonly accomplished by using coatings.

226 **PRINTING INK –** A fluid or viscous formulation used in printing, impressing or transferring an image onto a substrate.

227 **RADIATION-CURED INKS AND COATINGS –** A printing ink or graphic arts coating that dries by polymerization reaction by ultraviolet or electron beam radiation.

228 **SCREEN PRINTING –** A process of passing printing ink through a screen (a taut web or fabric) to make an imprint on a substrate. A refined form of stencil has been applied to the screen such that the stencil openings determine the form and dimensions of the imprint.

229 **SHEET-FED –** A lithographic printing process in which individual sheets of substrate are fed to the press sequentially.

230 **SOLVENT –** Organic compounds that are used as diluents, thinners, dissolvers, viscosity reducers, cleaning agents or for a similar purpose.

231 **SPECIAL PURPOSE –** Printing or coating on polyethylene, polyester and foil substrates for food packaging, health care products, fertilizer bags, or liquid-tight containers.

232 **VAPOR PRESSURE –** The pressure exerted at a uniform temperature by the gas of a substance when the gas is in equilibrium with the liquid (or solid) phase of that substance.

233 **VOC VAPOR PRESSURE (VOC COMPOSITE PARTIAL PRESSURE) –**The sum of the partial pressures of the compounds defined as VOCs, calculated according to the formula in Section 503.4 of this rule.

234 **VOC-CONTAINING MATERIAL –** Any chemical or item that contains an organic compound that participates in atmospheric photochemical reactions, except the non-precursor organic compounds. ~~This~~ "VOC-containing material" includes but is not limited to rags, waste coatings, waste brushes, waste rollers, waste applicators, waste solvents, and their residues are used in the surface preparation, cleanup, or removal of inks and surface coatings associated with graphic arts operations.

235 **WEB –** A continuous substrate capable of being rolled at any point during the coating process.

SECTION 300 – STANDARDS

301 **MANUFACTURERS AND SUPPLIERS:** A person selling, offering for sale, supplying for use, or manufacturing for sale within Maricopa County any VOC-containing material for use in graphic arts operations shall provide a material safety data sheet (MSDS) or product data sheet showing the material name, manufacturer's name, specific mixing instructions (if applicable) and VOC content as supplied. The VOC content requirement does not apply to radiation-cured inks and coatings.

302 **LITHOGRAPHIC AND LETTERPRESS OPERATIONS:** VOC emissions from all lithographic and letterpress operations are limited to the following:

302.1 **Materials:** An owner or operator of a lithographic press or letterpress shall limit VOC emissions from inks, varnishes, coatings, or adhesives, as applied, to less than or equal to 2.5 pounds per gallon (lbs/gal) (300 grams per liter ~~([~~g/l]~~)~~), less water and non-precursor organic compound unless VOC emissions are controlled by an ECS as described in Section 302.4 of this rule, ~~and by following~~ In addition, the owner or operator shall follow the work practices described in Section 306 of this rule.

302.2 **Fountain Solution ~~VOC Limits~~:** An owner or operator of a lithographic printing press shall limit the combined total volume of alcohol, alcohol substitute, and any other VOC in each fountain solution source to the percentages specified in Table 337–1.

Table 337–1. Maximum VOC ~~Limits by~~ Content in Percent by Weight (as Applied) for Fountain Solutions for Lithographic Printing.

Press Type	Maximum VOC ~~limits~~ Content for: Fountain Solutions Containing Alcohol	Fountain Solutions Containing Alcohol Refrigerated at or Below 60 °F (15.5 °C)	Fountain Solutions Containing Alcohol Substitutes
Heatset Web – Prior to Jan. 12, 2012: – On or after Jan. 12, 2012:	~~Current:~~ 5.0 % ~~Effective Jan. 12, 2012~~: 1.6 %	~~Current:~~ 8.5 % ~~Effective Jan. 12, 2012:~~ 3.0%	5%
Sheet-Fed	5%	8.5%	5%
Cold-Set Web	None	None	5%

302.3 Cleaning Solutions: An owner or operator of a lithographic printing press or letterpress shall reduce VOC emissions from cleaning solutions by following the work practices described in Section 306 of this rule and one of the following:

a. Use cleaning materials with a VOC composite vapor pressure less than 10 mm Hg at 20 °C; or

b. Use cleaning materials containing less than 70 weight percent VOC.

302.4 Emission Control System (ECS):

a. The VOC material limits of Section 302.1 of this rule do not apply when emissions of VOC to the atmosphere from the lithographic or letterpress printing operations are controlled by an ECS that meets one of the requirements listed in Table 337–2; and

b. The dryer pressure shall be maintained lower than the press room air pressure such that air flows into the dryer at all times when the press is operating.

Table 337–2. Minimum ECS Control Efficiencies for Lithographic and Letterpress Printing Operations.

ECS Installation Date	Minimum Control Efficiency
ECS installed prior to January 12, 2011	90 percent by weight control efficiency for VOC emissions from the dryer exhaust vent.
ECS installed on or after January 12, 2011	95 percent by weight control efficiency for VOC emissions from the dryer exhaust vent
Any installation date	~~Maintain VOC emissions from the dryer exhaust vent at a concentration~~ Concentration at or below 20 ppmv as hexane on a dry basis, as measured at the dryer exhaust vent.

302.5 Operation and Maintenance (O&M) Plan: The owner or operator of an ECS used to meet the requirements of this rule shall comply with the requirements in Section 307 of this rule.

303 ROTOGRAVURE AND FLEXOGRAPHIC OPERATIONS:

303.1 Inks, Coatings and Adhesives: The owner or operator of rotogravure or flexographic press shall limit VOC emissions from inks, coatings, and adhesives as listed in Table 337–3 or by an ECS as described in Section 303.3 of this rule. In addition, the owner or operator shall follow ~~and by following~~ the work practices described in Section 306 of this rule.

Table 337–3. Maximum VOC ~~Limits~~ Emissions for Materials Used in Rotogravure and Flexographic Operations.

Graphic Arts Material	Maximum VOC ~~Content Limit~~ Emissions ~~less water and non-precursor organic compounds~~ lbs/gal	grams/liter
Ink	2.5	300
Flexographic Ink Porous Substrate: – Prior to Jan. 12, 2012 ~~Effective January 12, 2012:~~ – On or after Jan. 12, 2012	2.5 1.9	300 225

Flexographic Ink Non-Porous Substrate	2.5	300
Coating	2.5	300
Adhesive: – Prior to Jan. 12, 2012 ~~Effective January 12, 2012:~~ – On or after Jan. 12, 2012	2.5 1.25	300 150

303.2 **Cleaning Solutions:** An owner or operator of a rotogravure or flexographic press shall reduce VOC emissions from cleaning solutions by following the work practices as described in Section 306 of this rule.

303.3 **Emission Control System (ECS):** The limits of Section 303.1 of this rule do not apply when emissions of VOC to the atmosphere from the rotogravure or flexographic printing operations are controlled by an ECS that maintains a dryer pressure lower than the press room air pressure such that air flows into the dryer at all times when the press is operating. In addition, an ECS shall ~~that meets~~ either:

a. Meet one ~~One~~ of the requirements listed in Table 337–4, or

b. ~~Reduces~~ Reduce the VOC emissions from the dryer exhaust vent by at least 90 percent by weight, and maintain an overall capture and control efficiency of at least 65 percent by weight.~~; and~~

~~**c.** Maintains the dryer pressure lower than the press room air pressure such that air flows into the dryer at all times when the press is operating.~~

Table 337–4. Minimum ECS Efficiencies for Rotogravure and Flexographic Printing Operations.

Press and ECS Installation Dates	Minimum Overall Capture and Control Efficiency	Minimum Capture Efficiency	Minimum Control Efficiency
Press installed prior to March 14, 1995 and controlled by an add-on ECS installed prior to January 12, 2011	65 %	75 %	90 %
Press installed prior to March 14, 1995 and controlled by an add-on ECS installed on or after January 12, 2011	70 %	75 %	95 %
Press installed on or after March 14, 1995 and controlled by an add-on ECS whose first installation date was prior to January 12, 2011	75 %	85 %	90 %
Press installed on or after March 14, 1995 and controlled by an add-on ECS whose first installation date was on or after January 12, 2011	80 %	85 %	95 %

303.4 **Operation and Maintenance (O&M) Plan:** The owner or operator of an ECS used to meet the requirements of this rule shall comply with the requirements in Section 307 of this rule.

304 **SCREEN PRINTING OPERATIONS:**

304.1 An owner or operator of a screen printing operation shall limit the VOC emissions from screen printing inks, coatings and adhesives as listed in Table 337–5 or by an ECS as described in Section 304.3 of this rule. In addition, the owner or operator shall follow ~~and by following~~ the work practices described in Section 306 of this rule.

Table 337–5. Maximum VOC ~~Content Limits~~ Emissions for Screen Printing Inks, Coatings, and Adhesives.

Material	Maximum ~~Pounds of~~ VOC Emissions ~~per gallon (grams/liter) less water and non-precursor organic compounds~~	
	lbs/gal	grams/liter
Inks and Coatings	3.3	400
Adhesives	1.25	150
Special Purpose, Extreme Performance	6.7	800

304.2 **Cleaning Solutions:** An owner or operator of a screen printing press shall reduce VOC emissions from cleaning solutions by following the work practices as described in Section 306 of this rule.

304.3 **Emission Control System (ECS):**

a. The VOC material limits of Section 304.1 of this rule do not apply when emissions of VOC to the atmosphere from the lithographic or letterpress printing operations are controlled by an ECS that meets one of the requirements listed in Table 337–4; and

b. The dryer pressure shall be maintained lower than the press room air pressure such that air flows into the dryer at all times when the press is operating.

304.4 **Operation and Maintenance (O&M) Plan:** The owner or operator of an ECS used to meet the requirements of this rule shall comply with the requirements in Section 307 of this rule.

305 **OTHER GRAPHIC ARTS OPERATIONS NOT COVERED BY SECTIONS 302, 303, ~~AND~~ OR 304 OF THIS RULE:**

305.1 **Limits of VOC Emissions:** ~~Any graphics arts operation which emits 25 tons per calendar year and 4200 pounds per month of VOC from all graphic arts and related coating operations shall:~~ The owner or operator of any graphic arts operation whose VOC emissions from all graphic arts and related coating operations prior to control are at least 25 tons per calendar year or 4,200 pounds per month shall follow the work practices described in Section 306 of this rule. In addition, the owner or operator shall:

a. Limit the VOC ~~content~~ emissions from inks, varnishes, coatings, or adhesives, as applied to ~~of~~ 2.5 ~~pounds per gallon~~ lb/gal (300 ~~grams per liter~~ g/l)~~, less water and non-precursor organic compounds~~; or

b. Install, operate and maintain an ECS that maintains a dryer pressure lower than the press room air pressure such that air flows into the dryer at all times when the press is operating. In addition, an ECS shall: ~~that meets either~~:

(1) Meet one of the requirements listed in Table 337–4; or

(2) ~~reduces~~ Reduce the VOC emissions from the dryer exhaust vent by at least 90 percent by weight, and ~~an~~ maintain a minimum overall capture and control efficiency of at least 65 percent by weight.~~; and:~~

~~**(3)** Maintain the dryer pressure lower than the press room air pressure such that air flows into the dryer at all times when the press is operating.~~

305.2 **Cleaning Solutions:** An owner or operator of a graphic arts printing press shall reduce VOC emissions from cleaning solutions by following the work practices as described in Section 306 of this rule.

305.3 **Operation and Maintenance (O&M) Plan:** The owner or operator of an ECS used to meet the requirements of this rule shall comply with the requirements in Section 307 of this rule.

306 **WORK PRACTICES – STORAGE, HANDLING AND DISPOSAL OF VOC-CONTAINING MATERIAL:** For the purpose of this rule, "in use" is the active application of contents to a substrate by pouring, siphoning, brushing, rolling, padding, wiping or other methods. For the purpose of this rule, "containers" include but are not limited to drums, buckets, cans, pails, and trays. An owner or operator of any graphic arts printing operation shall store, handle, and dispose of VOCs or VOC-containing material in a way to prevent the evaporation of VOCs to the atmosphere. Work practices limiting VOC emissions include but are not limited to the following:

306.1 **Labeling of Containers:** All containers that are 1 gallon or larger used for collection of VOC-containing material shall be clearly identified with their contents.

306.2 **Use of VOC-Containing Materials:** An owner or operator shall not leave containers of ink, coating, adhesive or fountain solution or any other VOC-containing material open when not in use.

306.3 **Storage and Disposal:** An owner or operator shall not use open containers for the storage or disposal of VOC-containing materials.

306.4 **Minimization of Spills:** An owner or operator shall implement procedures to minimize spills of any VOC-containing material during handling and transfer to and from containers, enclosed systems, waste receptacles and other equipment.

306.5 **Conveyance of VOC-Containing Materials:** All VOC-containing materials including VOC-containing cleaning materials shall be conveyed from one location to another in labeled, closed containers or pipes.

307 **OPERATION AND MAINTENANCE (O&M) PLAN REQUIREMENTS FOR AIR POLLUTION CONTROL EQUIPMENT AND APPROVED EMISSION CONTROL SYSTEMS (ECS):** An owner, operator, or person subject to this rule must provide, properly install and maintain in calibration, in good working order, and in operation air pollution control equipment required by this rule.

307.1 An owner, operator, or person subject to this rule must provide and maintain readily available on-site at all times (an) O&M Plan(s) for any ECS and any ECS monitoring devices that are used under this rule or an air pollution control permit.

307.2 An owner, operator, or person subject to this rule must submit to the Control Officer for review every O&M Plan(s) for any ECS including any ECS monitoring device that is used under this rule or required under an air pollution control permit.

307.3 An owner, operator, or person subject to this rule operating an ECS must install, maintain, and accurately calibrate monitoring devices described in the O&M Plan(s) including, but not limited to, monitoring devices that measure pressure differentials and other operating conditions necessary to determine if control devices are functioning properly.

307.4 An owner, operator, or person who is required to have an O&M Plan for any ECS including any ECS monitoring devices must fully comply with all elements of an O&M Plan(s) including, but not limited to every action, schedule, and condition identified in each O&M Plan.

307.5 An O&M Plan for any ECS including any ECS monitoring devices must include all of the following information:

a. ECS equipment manufacturer,

b. ECS equipment model,

c. ECS equipment identification number or identifier that owner, operator, or person subject to this rule assigns to such ECS equipment when manufacturer's equipment identification number is unknown, and

d. Information required by Section 502.4 of this rule. ~~(This is the recordkeeping section of the rule.)~~

307.6 The owner, operator, or person subject to this rule, who receives a written notice from the Control Officer that the O&M Plan is deficient or inadequate, must make written revisions to the O&M Plan for any ECS including any ECS monitoring devices and must submit such revised O&M Plan to the Control Officer within five working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon written request, for good cause. During the time that such owner, operator, or person subject to this rule is preparing revisions to the O&M Plan, such owner, operator, or person must still comply with all requirements of this rule.

SECTION 400 – ADMINISTRATIVE REQUIREMENTS

401 COMPLIANCE SCHEDULE: An owner or operator who chooses to, or is required to, comply with the new emission limits by installing or increasing the efficiency of an ECS under Section 302.4, 303.3, 304.3, or 305.1 of this rule, shall meet the following milestones:

401.1 Submit a compliance plan, by ~~(3 months after date of rule adoption)~~ April 12, 2011, or within three (3) months of becoming subject to the rule, to the Control Officer for approval which describes the method(s) used to achieve full compliance with the rule. The compliance plan shall specify dates for completing increments of progress, such as the contractual arrival date of new control equipment. The Control Officer may require an owner or operator submitting the compliance plan to also submit subsequent reports on progress in achieving compliance; and

401.2 Attain full compliance with all of the standards in this rule by ~~(12 months after date of rule adoption)~~ January 12, 2012, or within twelve (12) months of becoming subject to the rule.

SECTION 500 – MONITORING AND RECORDS

501 PROVIDING AND MAINTAINING MONITORING DEVICES:

501.1 ECS Monitoring Device(s): An owner or operator of an ECS pursuant to this rule shall install, maintain, and calibrate monitoring devices described in an O&M Plan. The monitoring devices shall measure temperatures, pressures, rates of flow, or other operating conditions necessary to determine if air pollution control equipment is functioning properly. Each ECS that is operated in compliance with this rule shall be equipped with monitoring device(s) capable of demonstrating that the ECS is operating in a manner that assures compliance with this rule. The monitoring device(s) shall be installed, calibrated, maintained, and operated according to their manufacturers' instructions and the O&M Plan.

501.2 Monitoring Fountain Solution:

a. An owner or operator of any graphic arts operation shall determine the VOC concentration of each fountain solution source containing any alcohol with a refractometer, a hydrometer, or conductivity meter. The instrument shall:

(1) Have a visual readout (analog or digital) with an accuracy of ±2 percent of the instrument's full scale, or ±0.5 percent absolute (such as for meter readings given in percent); and

(2) Be installed, calibrated, maintained, and operated according to the manufacturer's instructions and the O&M Plan.

b. The temperature of a refrigerated fountain solution shall be determined by the use of a temperature monitoring device. Each temperature monitoring device used for the purpose of this section shall be calibrated and accurate to ±0.5 °F.

502 RECORDKEEPING AND REPORTING: An owner, operator or person subject to this rule shall comply with the recordkeeping and reporting requirements of this section. Records can consist of but are not limited to purchase orders, invoices, receipts, usage records, MSDS, and hazardous wastes manifests. Any records required by this rule shall be retained for five (5) years and be made available to the Control Officer upon request. Records may be kept in either electronic or paper format.

502.1 Current Materials List: The owner or operator of a graphic arts operation shall maintain a current list of inks, coatings, adhesives, fountain-solution alcohol(s) and alcohol substitutes, thinners, cleaners, and any other VOC-containing materials used that includes at a minimum:

a. Material Name: Record the name/code/manufacturer and the appropriate material type category of inks, coatings, adhesives, fountain-solution alcohol(s) and alcohol substitutes, thinners, cleaning solutions, and any other VOC-containing materials used in the graphic arts processes; and

b. VOC Content: The VOC content of each material listed as pounds of VOC per gallon or grams of VOC per liter; and

c. Product Data Sheet: Specific mixing instructions and the VOC content as applied for products requiring dilution.

d. VOC Vapor Pressure: For each cleaning solution, list the VOC composite vapor pressure (VP) at 20 °C (68 °F) by providing one of the following:

(1) A current manufacturer's technical data sheet listing vapor pressure; or

(2) A current manufacturer's safety data sheet (MSDS) listing vapor pressure; or

(3) Actual vapor pressure test results.

502.2 Material Usage Records ~~of~~ for Graphic Arts Materials and Cleaning Solutions: The owner or operator shall update records showing the type and amount consumed of each graphic-arts ink, varnish, coating, adhesive, fountain solution, blanket wash, and all other cleaning solutions from all graphic arts and related coating operations prior to any control according to one of the following schedules:

a. Any Graphic Arts Operation Whose Total VOC Emissions From All Graphic Arts and Related Coating Operations Prior to Control are at Least 25 Tons Per Calendar Year or 4,200 Pounds Per Month: The owner or operator shall maintain material usage records:

(1) Daily, if noncompliant materials are used in conjunction with an emissions control system; or

(2) Monthly, if the facility uses materials complying with the limits in Sections 302, 303, 304, or 305 of this rule, and each material served by a control device is identified as such.

~~**a. Daily Material Usage Records for Sources Emitting 25 Tons or More:** Daily, an owner or operator of a graphic arts facility shall update usage records of materials specified in Section 502.2 of this rule if facility-wide such facility uses noncompliant coating in conjunction with an emissions control system; or~~

b. Any Graphic Arts Operation Whose Total VOC Emissions From All Graphic Arts and Related Coating Operations Prior to Control are Less Than 25 Tons Per Calendar Year or 4,200 Pounds Per Month: The owner or operator shall maintain material usage records monthly.

~~**b. Monthly Material Usage Records for Sources Emitting 25 Tons or More:** Monthly, an owner or operator of a graphic arts facility shall update usage records of materials specified in Section 502.2 of this rule if facility wide such facility emits 25 tons or more of VOC emissions per calendar year or 4200 pounds or more of VOC emissions per month from all graphic arts and related coating operations prior to any control and:~~

~~**(1)** The facility uses materials complying with the limits in Sections 302, 303, 304 or 305 of this rule; and~~

~~**(2)** Each material served by a control device is identified as such.~~

~~**c. Monthly Material Usage Records for Sources Emitting Less Than 25 Tons:** Monthly an owner or operator of a graphic arts facility shall update the usage records of materials specified in Section 502.2 of this rule, if facility-wide, such facility emits less than 25 tons of VOC emissions per calendar year or less than 4200 pounds of VOC emissions per month from all graphic arts and related coating operations prior to any control.~~

502.3 Fountain Solutions:

a. Alcohol-Containing Fountain Solutions:

(1) Daily: An owner or operator shall record the temperature of the refrigerated alcohol solution.

(2) Weekly: An owner or operator shall:

(a) Record the percentage of VOC for each different batch of fountain solution containing alcohol; and

~~**(3)**~~**(b)** Maintain a ~~weekly~~ record of the names and the most current mixing ratio for each different batch of all alcohol, alcohol-substitutes, and water used in making each fountain solution for that source.

b. Fountain Solutions Containing Alcohol Substitutes:

(1) Monthly: An owner or operator shall:

(a) ~~record~~ Record the mixing ratio of all alcohol-substitutes to water, for each fountain solution source on a press which never uses alcohol; and

~~**(2)**~~**(b)** Maintain a current list of the names of all fountain solutions used that contain ~~containing~~ alcohol-substitutes.

502.4 ECS Recordkeeping Requirements: The owner or operator of the facility shall document the installation, maintenance, and calibration of ECS monitoring devices described in an O&M Plan in the following manner:

a. Initial Installation: Make a permanent record of the date of installation of the ECS.

b. Daily: Make a permanent record of the operating parameters of the key systems as required by the O&M Plan. If the ECS was not operational due to equipment malfunction or not being used at any time during the day, record this fact in the permanent record; and

c. Within 24 hours of a completed scheduled routine maintenance, make a permanent record of the maintenance actions taken for each day or period in which the O&M Plan requires that maintenance be done; or

d. Enter an explanation for scheduled maintenance that is not performed during the period designated for it in the O&M Plan.

502.5 Facilities Claiming an Exemption: The owner or operator claiming an exemption under Section 103 of this rule shall document the quantity of VOC materials used and keep sufficient records of the basis of such calculations to justify the exemption status.

503 COMPLIANCE DETERMINATION – TEST METHODS: An exceedance of the limits established in this rule determined by any of the applicable test methods constitutes a violation of this rule. The EPA ~~and the American Society for Testing and Materials (ASTM)~~ test methods, ASTM International (ASTM) standards and other documents as they exist in the Code of Federal Regulations (CFR) as listed below, are adopted and incorporated by reference in Appendix G of the Maricopa County Air Pollution Control Regulations. These documents are available Maricopa County Air Quality Department, 1001 N. Central Ave., Phoenix, AZ 85004; or by calling (602) 506-0169 for information. ASTM standards are also available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428, or from its website at www.astm.org.

503.1 VOC Content of Materials:

a. The VOC content of graphic arts materials regulated by Sections 302, 303, 304 or 305 of this rule shall be determined using one of the following:

(1) EPA Reference Method 24 – Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, 40 CFR 60, Appendix ~~A~~ A–7; or

(2) EPA Reference Method 24A – Determination of Volatile Matter Content and Density of Publication Rotogravure Inks and Related Publication Rotogravure Coatings, 40 CFR 60, Appendix ~~A~~ A–7; or

(3) A material safety data sheet (MSDS) or product data sheet showing the material name and VOC content as applied.

b. Calculation of the VOC content of fountain solutions shall place the entire volume of the sample in the denominator, e.g., including water, alcohol, non-precursors, and all other solutes, such that the entire volume of the sample is included in the calculations.

c. Any hydrometer used for the purpose of this section shall be accurate within ±2 percent of the meter's full scale, or ±0.5 percent absolute (such as for meter readings given in percent) and be calibrated using one of the following methods:

(1) ASTM E100 – ~~05~~ 10 Standard Specification for ASTM Hydrometers.

(2) ASTM E126 – 05a Standard Test Method for Inspection, Calibration, and Verification of ASTM Hydrometers.

(3) A standard solution for the type of alcohol used in the fountain solution. The department is defining a standard solution as any solution that has a precisely known concentration.

503.2 Determining the Temperature of a Refrigerated Fountain Solution: The temperature of a refrigerated fountain solution shall be determined by the use of a temperature ~~control~~ monitoring device. Each

temperature ~~control~~ monitoring device used for the purpose of this section shall be accurate to ±0.5 °F and calibrated by one of the following methods:

a. ASTM ~~requirements~~ standards (ASTM E1-07 Standard Specification for ASTM Liquid-in-Glass Thermometers); or

b. National Institute of Standards and Technology (NIST) traceable calibration certificate; or

c. Manufacturer's recommended method of calibration.

503.3 Emission Testing:

a. Capture and control efficiency of an emissions control device shall be determined according to:

(1) "Guidelines for Determining Capture Efficiency", January 9, 1995, Candace Sorrell, Source Characterization Group A, Office of Air Quality Planning and Standards, US EPA.

(2) EPA Reference Method 204 – Criteria for and Verification of a Permanent or Temporary Total Enclosure, 40 CFR 51, Appendix M; or applicable Subparts 204A, 204B, 204C or 204D.

(3) EPA Reference Method 18 – Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, 40 CFR 60, Appendix ~~A~~A-6.

(4) EPA Reference Method 25 – Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, 40 CFR 60, Appendix ~~A~~A-7; or applicable Subparts 25A or 25B.

503.4 Vapor Pressure: The total composite partial vapor pressure of all VOCs in a solution shall be determined by one of the following methods:

a. ASTM D2879-97(2007) Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope; or

b. Calculations using certified data from a laboratory or manufacturer revealing the exact formulation; or

c. A Material Safety Data Sheet (MSDS) or product data sheet showing the material name and VOC vapor pressure; or

~~c.~~d. Calculating VOC composite partial vapor pressure as follows:

$$PP_c = \frac{\sum_{i=1}^{n} (W_i)(VP_i)/MW_i}{\frac{W_w}{MW_w} + \sum_{i=1}^{n} \frac{W_c}{MW_c} + \sum_{i=1}^{n} \frac{W_i}{MW_i}}$$

$$PPc = \frac{\sum_{i=1}^{n} \frac{(Wi)(VPi)}{MWi}}{\frac{Ww}{MWw} + \sum_{c=1}^{n} \frac{Wc}{MWc} + \sum_{i=1}^{n} \frac{Wi}{MWi}}$$

Where:

W_i = Weight of the "*i*"th VOC compound, in grams
W_w = Weight of water, in grams
W_c = Weight of exempt compound, in grams
MW_i = Molecular weight of the "*i*"th VOC compound, in g/g-mol
MW_w = Molecular weight of water, in g/g-mol
MW_c = Molecular weight of exempt compound, in g/g-mol
PP_c = VOC composite partial vapor pressure at 20 °C ~~(68°F)~~, in mm Hg
VP_i = Vapor pressure of the "*i*"th VOC compound at 20 °C ~~(68°F)~~, in mm Hg

~~**d.** A material safety data sheet (MSDS) or product data sheet showing the material name and VOC vapor pressure.~~